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ABSTRACT

Participation and status achievements of Spanish origin persons and American Indians in the labor market were evaluated relative to the participation of whites. An ultimate aim was to identify factors contributing to intergroup differences and to determine whether participation differences reflect discrimination. Factors examined were age, sex, education, job training, marital status, fertility, and family size. Within the labor market context, inequalities and discrimination were examined in terms of labor force participation, occupational achievement and mobility, and earnings from wages and salaries. Data were derived from the United States census' Public Use Sample files for 1970. The sample consisted of all persons 14 to 69 years of age who were not residents of institutions nor enrolled in school in 1970. Evidence led to 4 general conclusions: (1) color-ethnic-sex inequalities in status permeated the labor market; (2) Spanish origin, American Indian, and black men were discriminated against in their labor force participation, occupational achievement, mobility, and earnings; (3) women in these minority groups, along with white women, were subjected to severe discrimination, the magnitude of which was far greater than that experienced by minority men; and (4) inequalities among women in the labor market were comparatively small and the status of minority women was not consistently inferior to that of white women. (NQ)

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SPANISH AMERICANS AND INDIANS IN THE LABOR MARKET

Volume 1
1975

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PREFACE

Equality of opportunity has become more than an ideal in the United States. It is now an important part of social policy, and includes opportunities for active participation in the labor market. Employment represents an important segment of the lives of most people in America, as in most industrialized societies. In principle, employment status, occupational achievement, mobility and earnings should be based primarily on ability and competence. Differences in achievement because of color, ethnicity or sex are not consistent with the concept of equal opportunity. Yet inequalities and discrimination have not been eliminated. Therefore, the question of the extent to which color, ethnic and sex characteristics advance or impede employment and career chances is a very special and timely theoretical and policy issue. Based on a large national sample, this report provides an analysis of differences in participation and achievement between color-ethnic minorities and whites and also between men and women.

This research has evolved since its beginning in the fall of 1973 when the plan was to concentrate on the participation and achievement of Spanish origin persons. For comparative purposes, it was immediately obvious that not only whites but blacks too should be included in the study population. American Indians and Orientals were subsequently added, since the focus was on discrimination and since census data files contained the necessary information.

Findings are presented in two volumes: Volume I, Spanish Americans and Indians in the Labor Market, and Volume II, Orientals in the American Labor Market. This may be the first study to cover as many as ten distinctive color-ethnic groups in the labor market, particularly in the kind of detail provided in these two volumes. We do not take special pride in this. Rather it is a tribute to unnamed persons in the U.S. Bureau of the Census who had the foresight and capability to make such information available on computer tapes. To their credit, it is now possible to seek answers to questions which heretofore were unanswerable because of the lack of adequate data.

This two volume report is a collaborative effort in which the authors worked together closely and sometimes plagiarized ideas from one another. In the daily business of research, there was much discussion about questions and interpretations of particular aspects of the investigation. As indicated by suggestions for further research in Appendix D, discussions often turned to alternative directions this line of research might take in order to more nearly answer a question.

We are indebted, of course, to a number of people who in various ways and in connection with various aspects of this research made invaluable contributions. We are particularly indebted to Dr. Walter Postle and Robert Healy. Dr. Postle, Regional Economist, U.S. Department of Labor, Manpower Administration, Region IX, was instrumental in making arrangements for most of the early phases of the data processing. Bob Healy, Lawrence Berkeley Laboratories, very meticulously developed computer programs, prepared table formats and executed computer runs. In the earliest of the planning phases, Dr. Thomas R. Panko provided advice and counsel regarding occupational classifications and scaling. Rosemary Waters single-handedly typed several drafts of text and tables while maintaining some semblance of order among the authors.

GLW
DEJ
RJH
ACdF

NOTATIONS AND ABBREVIATIONS

PUS	Public Use Sample
LFP	Labor force participation
LFPR	Labor force participation rate
NILF	Not in labor force
ER	Employment rate
UR	Unemployment rate
HOH	Head of household
CEB	Children ever born
OCC 70	Occupation score, 1970
OCC 65	Occupation score, 1965
D	Index of dissimilarity
RMS	Relative mobility score
PC. . .	Abbreviated footnote formal for designating published data from the 1970 census. For example, PC(2)-1C refers to: U.S. Bureau of the Census Census of the Population: 1970 Subject Reports Final Report PC(2)-1C Persons of Spanish Origin
---	Estimated values not shown because of small frequencies in PUS samples. The basic rule was to calculate averages, rates and percentages with base frequencies of at least 20.

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CHAPTER 1

ASSESSING MINORITIES IN THE LABOR MARKET: INEQUALITY OR DISCRIMINATION?

This study is aimed at understanding differences in achievements of minorities in the labor market. The national goal of equal employment opportunities for all regardless of color, sex, age or national origin has yet to be fully realized. Since a number of programs have been designed and activated to help accomplish this goal, it is important to assess the extent to which participation, achievement and mobility in the labor market have become equal. Only recently has there been data at the national level which would permit detailed assessments of American Indians, Mexicans, Puerto Ricans and Cubans, or of Japanese, Chinese, Filipinos and Koreans. While there is considerable information about the labor market activity of some minorities, especially blacks, almost no information has been available for others. Even for black workers, however, relatively little is known about certain aspects of their involvement in the labor market, especially their occupational mobility. Moreover, the relatively recent surge of interest in the welfare of women has not been matched by comprehensive information on the achievements of women, many of whom are doubly disadvantaged by their sex and color or ethnic origin.

Results of this study are presented in two volumes: Volume I, Spanish Americans and Indians in the Labor Market, and Volume II, Orientals in the American Labor Market. This division of labor is dictated by three general considerations. First, Spanish, Indians and blacks are generally among the most disadvantaged, whereas Orientals have been relatively successful in matching the accomplishments of the white majority in recent years. Second, the several populations with roughly comparable heritage are treated together. Mexicans, Puerto Ricans and Cubans have in common a Spanish heritage, just as Japanese, Chinese, Filipinos and Koreans have an Oriental heritage, although there are many specific differences among these groups. American Indians, of course, differ from all other American minorities in their experiences through history. They are treated in this analysis with the more disadvantaged groups. Third, the sheer detail of information encourages some separation of the findings. Both volumes provide comparative data for whites who, as a majority group, represent a benchmark. Volume I also contains detailed comparable data for blacks as the largest single color minority, although the study was not designed initially to concentrate on blacks.

OBJECTIVES

The chief purpose of this report is to describe and evaluate participation and status achievements of Spanish origin persons and American Indians in the labor market relative to the participation of whites. An ultimate aim is to identify factors contributing to intergroup differences and to determine whether participation differences reflect discrimination. There are substantial background differences among Mexicans, Puerto Ricans, Cubans and Indians, as described in the next chapter, although they have generally the common characteristic of relatively low levels of achievement in the labor market. Therefore, a central issue is whether their relative lack of success is at least partly attributable to discrimination in the job market.

Within the labor market context, inequalities and discrimination will be examined in terms of four major areas: (1) labor force participation, (2) occupational achievement, (3) occupational mobility, and (4) earnings from wages and salaries. Differences in achievement between Orientals and whites as well as among Orientals may be attributed to differences in personal background factors, such as age, sex, education and vocational training, which are typically antecedent to entrance into the job market. Differences also may result from factors which do not necessarily antedate employment, such as marriage, fertility, size of family or health.

THE SAMPLE DATA

The basic information for this study was derived from the Public Use Sample (PUS) files from the United States census for 1970. These files represent records from the 1970 census sample questionnaires. Each of six primary PUS's constitutes a one-percent sample and each is self-weighting, which means that a person included in a one-percent sample can be assigned a weight of 100 to obtain an estimate of the frequency of a particular characteristic for the entire population. Since the PUS's contain a number of questions in common, it is possible to combine all six to obtain a national sample as large as 6% for some purposes.

Variations in the size of the sample populations in this study result not only from differences in the size of the base populations but also from differences in the sampling fraction for different phases of the study. In general the largest possible sample (6%) was designated for American Indians, but for the analysis of occupational mobility it was necessary to reduce this to a 3% sample because the census items on employment in 1965 and 1970 were included in only half of the six PUS's. Three percent samples of Mexicans, Puerto Ricans and Cubans and two percent samples of blacks and whites were ample for all comparative analyses.

The actual selection of persons to be included in the study was based on several considerations. A primary objective in designating sample populations for the labor force participation phase of the study was to include all persons who were actual or potential members of the labor force. Only those employed or with earnings were identified for later phases of the analysis. The total samples therefore include all persons 14 to 69 years of age in 1970 who were not residents of institutions nor enrolled in school. The age range was considered broad enough to include persons most likely, by age alone, to be actual or potential participants in the labor market. Institutional and student populations were excluded on the grounds that they involve special circumstances, the effects of which might confound the resulting observations about labor market behavior. Persons living in group quarters or institutions included those living in such diverse places as correctional institutions, mental hospitals, homes for the aged and dependent, homes for the physically handicapped, rooming and boarding houses, military installations and college dormitories. The labor market activity of such persons is likely to differ from those not living in institutions. Similarly, students are unlike nonstudents in a number of ways, although many students are also in the labor force. By exclusion of institutional and student populations, then, the sample populations are made more homogeneous.

Spanish origin persons are identified by separate codes in the census files, whereas whites, blacks and Indians are identified by the race codes. Since the Spanish are also included in the race codes, they were separated and subtracted in order to avoid double counts of the Spanish. The final selection resulted in the following samples:

	Male	Female
Mexican (3%)	29,457	33,759
Puerto Rican (3%)	7,213	8,498
Cuban (3%)	4,004	4,855
Indian (6%)	9,314	11,195
Black (2%)	93,580	120,705
White (2%)	883,838	1,018,059

INEQUALITY, SEGREGATION AND DISCRIMINATION

Conceptualization and measurement of discrimination pose difficult problems despite the voluminous literature on discrimination. There is little argument that either blacks or women have been subject to discrimination in the labor market. On the other hand, there have been few attempts to measure the degree to which such discrimination exists (Blalock, 1967:10). Part of the difficulty in defining discrimination can be attributed to the failure to distinguish between the process of discriminating and the results of this process. Furthermore, discrimination is often conceived as "unequal treatment of equals" without fully specifying "equal with respect to what." Presumably, minority members are treated unequally because of their minority characteristics rather than because of other traits. However, the identification of factors relevant to equal (or unequal) treatment in the labor market is essential for any consideration of equality and discrimination.

Discrimination is defined for purposes of this study as (1) an effect or resultant condition of discriminatory processes, (2) represented by inequality in the labor market among persons equally well qualified for (3) achievement in the labor market. This conceptualization of discrimination has several important implications. First, it is developed partly in anticipation of the census data used in this study, which are better suited to an investigation of discrimination as a product than as a process. Second, the focus of attention is clarified by specifying which aspects of discrimination will be examined. Emphasis on the effects of discrimination does not imply, of course, that behavior involved in the process of discrimination is unimportant. Third, discrimination is regarded as unequal achievement among equals, where "equal" is defined on the basis of factors relevant to participation and achievement in the labor market. In general, these factors include the acquisition of experiences and skills important (a) to obtaining employment, (b) to attaining an occupational level consistent with personal qualifications, (c) to advancing in the occupational structure on the basis of ability, and (d) to earnings commensurate with skills and level of occupational achievement. In a negative sense, relevant factors imply the absence of constraints or disabilities which, if present, would serve to limit participation and achievement. Fourth, equality is treated as a status equivalent, i.e., persons occupying the same position in the social structure or in the labor market are viewed as equal in status.

Whether by accident or intent, equally well-qualified persons must be treated unequally in order for discrimination to result. What constitutes being qualified for achievement in the job market is typically rather elusive. Here we distinguish three types of factors which influence the participation of individuals in the job market: skill factors, or those things that help prepare people for entrance into and achievement in the labor market; non-skill factors, or personal characteristics, which may affect chances of getting a job but which do not directly involve job skills; and situational factors, such as residential location, the demand for workers or transportation facilities. Among the many forces that determine the nature and extent of labor market participation, this study is concerned with the first two types of influences. These may be considered as primary and secondary, depending on whether they bear directly or indirectly on individual work skills and employment. Education, job training, and health for example, are primary factors in that they have to do with preparation and readiness for work. Marital status, fertility and size of family are secondary, since they have a less direct though nevertheless important bearing on work skills and potential. As a resultant condition, discrimination implies that barriers have been imposed which effectively prevent minorities from reaching their full potential in the labor market.

MEASURES

Three kinds of measures are necessary to operationalize the concepts discussed so far: equal qualifications, participation and achievement, and discrimination.

As an indicator of level of educational achievement, years of school completed is a conventional measure, and those with similar levels of attainment are often regarded as equally well equipped for work achievement. Numerous studies have consistently found positive relationships between years of school completed and "success" in the job market. Nevertheless, formal schooling is a rather crude measure of either educational attainment or of preparation for work. Two major assumptions may be questioned. First, there is the assumption that equivalence in years of school completed means equivalence in education attainment. This assumption may be challenged on the grounds of differences in the quality of teaching, educational facilities and curricula sometimes within the same school as well as between schools, school systems, communities and regions. The fact that two people have completed twelve years of school does not guarantee that they have attained the same educational level. It may be noted also that twelve years of schooling does not necessarily indicate twice as much education as the completion of six years. Second, the assumption that equivalence in educational level means being equally well prepared for participation and success in the job market may be challenged for some of the same reasons plus the lack of vocational preparation for many students. However, it is not totally unreasonable to assume that on the average persons with similar levels of schooling are similarly qualified.

As a complementary indicator of qualification for achievement, job training bears more directly on the development of work skills than does education. Job training programs are relatively short-term experiences for more specific purposes than formal schooling. The quality as well as the specific content of training programs are not identical any more than schools are identical. But since job training is so directly related to the development of work skills, intergroup differences in participation in job training may be interpreted as differences in preparation for work.

Health, or conversely disability, is a further indicator of preparation and readiness for work. Unlike education and training, health does not involve the development of work skills, but a disability can serve to limit participation in the labor market. Certain kinds of physical or mental disabilities can severely restrict, even preclude, entrance into or full participation in the labor market. While there is no suitable information for ascertaining degrees of health, census data make it possible to distinguish between certain aspects of "poor health," as indicated by the duration of an illness or disability.

In short, equally well qualified persons will be identified on the basis of their educational attainment, job training and health. The expectation, of course, should be that equally well qualified persons will on the average do equally well in the labor market. The net result of conceptual, technical and practical problems requires cautious interpretations with appropriate qualifications because of less than perfect data and measures which depend heavily on underlying assumptions.

Measurement of participation and achievement in the labor market is easier in some respects than determining equal qualifications for achievement. In part this is true because there are a number of conventional measures for labor force participation (labor force participation rates, employment and unemployment rates, and weeks and hours worked) and for income (median earnings from wages and salary). However, standards for determining levels of occupational achievement and measuring the several components of occupational mobility are far less conventional and less widely accepted. Census occupational categories have been employed for many years with only relatively minor modifications from time to time, but unfortunately there is no inherent ranking of occupational categories. In order to distinguish levels of occupational achievement, it is necessary to construct an index capable of ordering occupational categories from high to low. This procedure has been accomplished for this study, as will subsequently be described more fully.

Measurement of occupational mobility presented the most difficult of the measurement tasks in this investigation, because of the very complexity of mobility itself and because relatively little progress has been made toward developing adequate mobility measures. Not only can mobility be characterized by its incidence, but also by distance and direction of movement between occupational origins and destinations. Given an occupational scale, such as that constructed for this study, direction of movement is easily determinable. But measuring mobility distance is far more complicated. For other than purely descriptive purposes, the difference between occupation scores at two points in time is an unsuitable measure of distance. Since the difference in occupation scores is a function of both origin and destination levels, the difference in scores confuses causes with effects.

No single or simple measure adequately assesses discrimination. Moreover, discrimination may be found at either some or all stages of individual participation in the job market. In general, the strategy for determining the presence of discrimination in this study will be to compare persons defined as equal in one or more respects--other than color, ethnicity or sex--to determine whether or not their participation and achievement in the labor market is also equal. The presence of discrepancies can then be interpreted as discrimination. This strategy can be illustrated briefly. Orientals and whites with twelve years of school completed may be assumed to be equally well qualified as far as educational attainment is concerned. Therefore, if Filipinos, for example, were found to have lower employment rates, lower occupation scores, a lower incidence of upward occupational mobility and lower average earnings than whites, it would be quite evident that among high school graduates Filipinos were subject to discrimination in comparison with whites. It is not expected that actual patterns will be as neat and clear as in this hypothetical illustration, and it may well be that one group sometimes ranks higher and sometimes lower than other groups.

One specific measure, applied intermittently throughout the analysis can sometimes be interpreted as a measure of discrimination. This is the index of dissimilarity, D, which basically measures the unevenness in a pair of percentage distributions. The D-index can serve as an indicator of discrimination where, for example, the occupational distributions of two groups of high school graduates are under examination. Since each group has the same educational level, their occupational distributions should be very similar and any noticeable difference reflected by the D-index suggests the possibility of discrimination. However, as noted at appropriate points later in the discussion, unless two groups are equally qualified, the dissimilarity index probably measures something besides discrimination.

The ensuing discussion is organized in both a logical and functional sense. We begin with questions of labor force participation, which are followed by the topics of occupational achievement, occupational mobility and earnings from wages and salaries. Earnings are directly dependent on the kind of occupation a person has attained and perhaps also on movement between jobs in the recent past. Occupational achievement must, of course, be preceded by active participation in the labor market. Hence, there are a series of stages leading to the outcome of earnings from an occupation. Inequalities or discriminations can occur at one or more of these stages, and discrimination at prior stages can exert significant influences on subsequent stages. For this reason the analysis proceeds from the point of "getting into the labor market" to comparisons of levels of earnings.

CHAPTER 2

PROFILES OF MINORITIES: SPANISH AND INDIAN

More than nine million persons of Spanish origin were enumerated in the United States in 1970, representing nearly five percent of the total population. Over two-thirds of the nine million are accounted for by three distinct Spanish origin population groups--Mexican, Puerto Rican, and Cuban (Table 2.01). Persons of Mexican descent by far constitute the largest single segment (about half) of the Spanish origin population in the U.S.--more than four and a half million. Puerto Ricans on the mainland number about a million and a half, and there are well over a half million Cuban Americans, many of whom came to the U.S. as refugees from the Castro regime. Nearly two million additional persons also trace their heritage to a Spanish origin, mostly from Central or South America; this latter group is extremely diverse in many ways.

Because the 1970 census marked the introduction of the Spanish origin identifier, it is difficult to assess the amount of growth of the Spanish origin population in the U.S. (Previous and current alternative Spanish identifiers include Spanish language, Spanish surname, and Puerto Rican birth or parentage.) But overall high birth rates and continuous immigration, both legal and illegal, have no doubt produced increasing numbers of Spanish origin persons since 1950. For example, the number of Spanish surname persons in the Southwest, where of the various Spanish populations Mexican Americans predominate, doubled between 1950 and 1970. Likewise, the Puerto Rican population on the U.S. mainland experienced an increase of about a half million during the last intercensal period (1960-70). Of course, the great bulk of the Cuban population in the U.S. has come to the states relatively recently. The first influx began about January 1959, reaching a peak in 1961 and the first half of 1962 (see Fagen, Brody, and O'Leary, 1968), and the second from December 1965 to April 1973, with the latter period bringing in more than a quarter of a million Cuban immigrants (see also Giberga, 1974).

In 1970, the American Indian population numbered above three quarters of a million people, (Table 2.01) or about the number estimated to have been in what is now the U.S. when Columbus first landed here (Marden, 1952:317). This amounts to about one-half percent of the nation's total population. Undoubtedly, there are also substantial numbers of persons in the U.S. with varying degrees of Indian ancestry who are classified in other racial categories. Growth of the American Indian population has been significant --fifty-one percent between 1960 and 1970. However, this figure should be viewed with some caution, since some of the "growth" may be attributable to more accurate enumeration in 1970.

Table 2.01. Spanish Origin and American Indian Persons in the United States, by Selected Demographic Characteristics, 1970

Variables	Mexican	Puerto Rican	Cuban	Indian
Total	4,532,435	1,429,396	544,600	763,594
Percent	100.0	100.0	100.0	100.0
Sex:				
Male	49.5	49.3	47.4	49.2
Female	50.5	50.7	52.6	50.8
Sex Ratio	98	97	90	97
Age:				
Under 18	47.2	46.7	32.4	45.2
18-64	48.6	50.9	61.2	49.1
65 +	4.2	2.4	6.4	5.7
Median Age	19.3	19.8	31.7	20.4
Males	19.0	18.9	30.8	19.9
Females	19.6	20.7	32.5	20.9
Residence:				
Urban	85.5	97.7	98.5	44.6
Rural nonfarm	12.9	2.2	1.5	49.2
Rural farm	1.6	0.1	---	6.2
Region:				
Northeast	1.0	81.3	32.2	6.0
North Central	8.3	9.4	6.0	18.9
South	37.5	4.5	51.9	25.5
West	53.3	4.8	9.9	49.7
Education:*				
Less than high school	75.8	76.6	56.1	66.7
High school graduate	16.8	17.7	22.7	22.0
College (any)	7.4	5.7	21.2	11.3
1-3 years	4.9	3.5	10.1	7.5
4 years or more	2.5	2.2	11.1	3.8
Total high school graduates	24.2	23.4	43.9	33.3
Median years of school	8.1	8.7	10.3	9.8

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* Includes only persons 25 years of age or older. Percentages on education based on following totals: Mexican--1,824,731; Puerto Rican--573,218; Cuban--320,324; Indian--322,652.

Source: PC(2)-1C, Tables 1, 2, and 4
PC(2)-1F, Tables 1-3

In some ways, it is inappropriate to treat all American Indians as a homogeneous population just as it is to do so with the Spanish origin population. The American Indian Tribal Classification List employed by the U.S. Census Bureau includes more than eighty major tribal categories, and less than half are made up of at least four thousand members. The Navajo tribe is the largest of the tribes in the U.S., with almost ninety-seven thousand members accounting for about thirteen percent of the total American Indian population. Also significant in size are the Cherokee (66,150) and Sioux (47,825). However, many tribes count less than a thousand among their numbers. Unfortunately, it is not feasible here to treat each tribe separately (there are also tribal divisions within most tribal categories as well), nor would the overall relatively small numbers of American Indians allow for much detailed analysis of individual tribes. It is therefore necessary to treat American Indians as one population. But to the extent Indian cultures share a number of common attributes, this is perhaps justified. Moreover, most American Indians are disadvantaged in comparison with whites and in many instances physically isolated from the rest of society.

Population Composition

Sex, age and racial composition differ among the Mexican, Puerto Rican and Cuban populations in the U.S. As with the total U.S. population, the sex ratio for Mexicans and Puerto Ricans slightly favors females. However, among Cubans only ninety men are present for every one hundred women. This predominance of Cuban women in part represents the Cuban government's more liberal policy toward female exiles. It was not unusual for a Cuban immigrant mother to come to the U.S. with her children while the father was forced to remain behind, perhaps to complete military or other government duty. Moreover, the proportion of all immigrants to the U.S. has shifted in recent years in favor of females for the nation as a whole (North, 1974:14).

With a median age of nearly thirty-two, the Cuban population is easily the oldest of the three Spanish populations, being more than ten years the elder of its Mexican and Puerto Rican counterparts and almost four years older than the average for the total U.S. population. Yet, in all three Spanish populations, median age of women (as is true generally in the U.S.) is older than that for men. Cubans have the highest proportion of persons in the working ages (and, hence, lowest dependency ratio); three out of five Cuban Americans are between the ages 18 to 64. Mexicans and Puerto Ricans, on the other hand, have a large proportion of persons under the age of eighteen--about forty-seven percent each.

Most persons of Spanish origin in 1970 were identified as white, with less than seven percent classified as nonwhite; five of that seven percent were classified "Negro". There are, however, questions about the reliability of color identifications among the Spanish in the census. Fitzpatrick (1971:107) has shown that a higher proportion of Puerto Ricans in New York City identify themselves as black, brown, or colored than is evident from census figures. For many dark-skinned Spanish, color can and often does intensify the negative effects of ethnicity. Furthermore, those of "intermediate" color are sometimes "caught in the middle" in a society where color lines are usually more firmly drawn and regarded than is true in many Spanish cultures, such as in Puerto Rico.

With women comprising almost fifty-one percent of the total, the sex composition of the American Indian population is much like that for the nation as a whole. But with a median age of 20.4, the relative youthfulness of American Indians parallels more closely that of the Mexican and Puerto Rican populations in the U.S.; in addition, they also share with these same population groups the fact that a very large proportion (about forty-five percent) of their total is under eighteen years of age. However, rather than immigration, the younger age structure of the Indian population is probably due more in greater degree to higher birth rates in combination with improved health measures that have reduced infant mortality. In regard to the latter population factor, the infant death rate has declined significantly from 62.5 per 1000 live births in 1955 to 23.5 in 1971 (Brodt, 1975), due in large part to the efforts of the Indian Health Service. However, infant and maternal mortality rates continue to be higher for Indians than for the U.S. as a whole (Johnson, 1975:11). Moreover, "Young Indian people today, who have clear alternatives, are opting in surprising numbers to remain Indian and promote Indian goals, using their educational advantages toward this end (Lurie, 1971:421)."

American Indians are identified in the census as a separate racial entity. However, it is sometimes conceded that Indians suffer less prejudice and discrimination on that basis than their black and Oriental counterparts. In fact, Lurie (1971:457) asserts, "Not being considered 'black', Indians who wished could be 'white'." Furthermore, helping to lessen the importance of race in relation to Indians and whites is their incalculable though certainly considerable interracial mix in the population.

Regional Distribution

Distinct differences in settlement patterns characterize the Spanish in the U.S., although on the whole they are predominantly urban dwellers (about ninety percent). Urban residence is especially evident in the case of Puerto Ricans and Cubans. Although fifteen of every hundred Mexican Americans claimed rural residence in 1970, as a group they appear to have been urbanizing rapidly; between 1950 and 1960, their rate of urbanization exceeded that both for whites and nonwhites (Grebler, Moore, and Guzman, 1970:112).

Of the four major census regions in the U.S. (Northeast, North Central, South, and West), Mexican, Puerto Rican and Cuban persons are found least in the North Central region. Most Mexican Americans live in the West, particularly Southwest, and not surprisingly, the two states with greatest numbers of Spanish origin persons are California and Texas. Puerto Ricans have settled predominantly in the Northeast, many of course in the New York City area. Cubans have tended to concentrate in the South, primarily Florida and especially in the Miami area; to a lesser extent, they are also found in the states of New York and New Jersey.

Within these relatively high density Spanish areas, the Spanish also tend to be residentially segregated from the "dominant group" in particular neighborhoods and sections of cities although not to the extent of blacks in cities (Taeuber and Taeuber, 1964:65-68; Grebler, Moore, and Guzman, 1970:271-289). Despite such high concentrations in a relatively few areas, many more are scattered in cities across the nation.

In contrast to the Spanish in the U.S., American Indians are more often rural than urban dwellers (about fifty-five percent) although they are becoming increasingly urban (Johnson, 1975:1). Most of those in rural areas live on reservations. As a group, Indians are much more widely dispersed than any one of the specific Spanish populations and probably more so than the Spanish origin population as a whole in the U.S. They are however far from uniformly distributed on a geographical basis. While not the same, the regional distribution of Indians most closely approximates that of Mexicans; half lives in the West with another quarter of the Indian total in the South. But in the North Central region of the U.S., where there are relatively few Spanish, resides almost one of every five Indians.

States with the heaviest concentration of Indians include Oklahoma (96,803), Arizona (94,310), California (88,263), New Mexico (71,582), and North Carolina (44,195). Together, these five states account for over fifty percent of the total enumerated Indian population in the U.S. By U.S. standards, few cities can boast a substantial Indian population (i.e., more than ten thousand). The Los Angeles Standard Metropolitan Statistical Area (SMSA), with almost twenty-four thousand, easily has the most Indians of any U.S. metropolitan area. Next are Tulsa (15,183) and Oklahoma City (12,951), both in the state of Oklahoma, San Francisco (12.041), and Phoenix (10,127). The New York and Minneapolis-St. Paul SMSA's also have close to ten thousand American Indians each among their numbers.

Education

A greater proportion of Americans than ever before attends school--almost sixty million--according to the 1970 census. Over three million of that number were of Spanish heritage, which is about the same proportion of Spanish origin persons in relation to the total population (five percent).

Despite lower levels of educational attainment in the past, there is evidence that the educational gap between Spanish and whites has been narrowing. For example, for ages 25 to 29, the median years of school completed for Spanish and white persons in the U.S. are 12.1 and 12.7, respectively. And with an increase in age, the educational disparity tends also to increase. However, the median years of school completed for all Spanish origin persons twenty-five years of age and over in 1970 was 9.1, three years below the same figure for the nation as a whole. Moreover, less than a third of Spanish origin persons had completed high school in 1970.

Highest overall among the Spanish in education is the Cuban population (10.3) of which almost forty-four percent are high school graduates. Median years of completed schooling for Mexicans (8.1) and Puerto Ricans (8.7) is substantially lower. Of the three Spanish populations, Cubans also have the highest proportion of college graduates (over eleven percent), a figure surprisingly more than four times that for Mexican and Puerto Rican Americans. Nevertheless, even Cuban Americans fall short of the national level of educational attainment.

The overall education figures for Indians are almost as dismal as those for Mexicans and Puerto Ricans in the U.S. Although median years of schooling completed by Indians (9.8) is not much lower than that for Cubans, only one-third of American Indians over twenty-four years of age has completed four years of high school, with the percentage of college graduates less than four percent. As with the Spanish and black populations in the U.S., this educational gap in comparison with whites appears to be narrowing at the younger age levels. For example, median years of school completed for Indian men and women ages 25 to 34 are 12.2 and 12.1, respectively, or less than a year's difference in comparison with whites and similar to the same figures for Cubans. If one looks only at Indians living in urban areas, the percent having graduated from high school would be virtually identical to that for the Cuban population.

Family and Fertility

Of the more than two million Spanish origin families in the U.S., the great majority (about eight-five percent) are of the husband-wife type. Yet, almost one in four Puerto Rican compared to about one in eight Mexican and Cuban families has a female as head of the family. Since the sex ratio, as earlier noted, is not unduly imbalanced, the lack of Puerto Rican men does not appear to provide a viable explanation for this situation. In fact, on that basis, more Cuban families should be female-headed. However, there are some indications that adjusting to city life (New York) in the states has been an especially difficult experience for many Puerto Rican families. Particularly problematic has been the change in values: "Probably the most serious is the shift in roles of husband and wife. . . it is frequently easier for Puerto Rican women to get jobs in New York rather than Puerto Rican men. This gives the wife an economic independence which she may never have had before, and if the husband is unemployed while the wife is working, the reversal of roles is severe (Fitzpatrick, 1971: 94-95)."

Since "incomplete" family structure may be inversely related to the occupational achievement of a group, especially the achievement potential of children in such families, it is of some significance that only about sixty-five percent of all Puerto Rican children under eighteen years of age in 1970 lived with both parents, while for Mexican and Cuban children the same figure exceeded eighty percent.

To some extent, this situation is also reflected by figures on marital status. Only about sixty-eight percent of ever-married Puerto Rican women compared to seventy-two and seventy-seven percent of ever-married Cuban and Mexican women, respectively, were married in 1970 with spouse present, with almost fourteen percent of Puerto Rican women "separated". Because of strong religious norms against divorce deriving from their predominantly Roman Catholic adherence, this high degree of separation may be the only acceptable alternative for many Puerto Rican couples who can no longer live together. Of course, the importance of the Catholic religion is probably no less significant for Mexicans and Cubans, but the maritally disruptive influence of life in the U.S. may be more severe on Puerto Ricans, perhaps related in part to the uniqueness of life in New York City.

Among the Spanish, cumulative fertility, as reflected by the number of children ever born (CEB) to ever-married women ages 15 to 44, is highest for Mexican followed in order by Puerto Rican and Cuban women. Among women 35 to 44, many of whom have completed childbearing, the number of CEB per one thousand women for Mexicans (4530) is more than twice that for Cubans (2064). Moreover, the same holds even if the comparison is made only between Mexican and Cuban women in urban areas. The same figure for Puerto Rican women (3418), while lower than for Mexican women, is still noticeably higher than for Cuban women.

This pattern is also paralleled by differences in family size in families with a Spanish origin head of household. Average family size for Mexican families is 4.6 (though higher in rural and slightly lower in urban areas of residence). For Puerto Rican and Cuban families, the respective figures are 4.2 and 3.7. However, if the percent of Puerto Rican women married with spouse present were more like that for Mexican women, the average size of the Puerto Rican family might resemble even more closely that for Mexicans. In spite of this likelihood, Mexican families are more prone to have larger numbers of children under eighteen in the home. Over thirteen percent Mexican families have five or more of their own children under eighteen in the home; less than nine and two percent Puerto Rican and Cuban families, respectively, are as heavily peopled by their own children.

Husband-wife families constitute more than three-fourths of all Indian families. The eighteen percent of Indian families that are female-headed is proportionately greater than among Mexican and Cuban but less than among Puerto Rican families. Moreover, the percentage of Indian female heads is only slightly greater in urban than in rural areas. About sixty-nine percent of all Indian children under eighteen years of age live with both parents.

Cumulative fertility of Indian women is about the same as that for Mexican women (4554 per thousand for ages 35 to 44) and is expectedly higher in rural than in urban areas. Average family size among Indians (4.5) is also like that for Mexican families, with about a half-child less in urban and a half-child more in rural areas on the average. Again, like Mexican families, about thirteen percent of Indian families have five or more children under eighteen in the home.

Immigration

Immigration patterns and experiences have always had direct implications for labor force behavior and potential for each wave of immigrants to the U.S. Among the Spanish origin populations in the U.S., the three major Spanish populations differ widely in this respect.

Mexicans have the longest history of immigration to the U.S. of the Spanish populations, though more recent than most European and Asiatic immigrant groups. Two periods of heavy Mexican immigration can be identified: after the Mexican Revolution in 1911 and after World War II. The earlier influx of immigrants settled primarily in the Southwestern states and engaged in wage labor on large farms. The more recent wave, while manifesting some similarity to the earlier pattern, moved more frequently into urban centers for nonagricultural employment.

As has been true for immigrants as a whole to the U.S., the sex ratio has changed from the historical predominance of Mexican immigrant men. This situation stems in part from the fairly recent requirement of job certification for immigrant men and the increased opportunities for immigration of wives of previous Mexican immigrants. It has also become easier for female domestics to migrate to areas in short supply of household workers. Mexican immigrants have been predictably young, and more youthful in fact than immigrants from other countries. However, they continue to be occupationally underskilled and in recent years increasingly without an occupation (i.e., largely women and children) (Grebler, Moore, and Guzman, 1970:69-71).

Because of its length and harsh terrain, the border between the U.S. and Mexico is and has been difficult to patrol. As a result, illegal entry by Mexicans into this country, often associated with the term "wetbacks", has been a frequent occurrence over the years and is a continuing phenomenon. In fact, Mexico has been the main single source of illegal entrants to the U.S. (Grebler, Moore, and Guzman, 1970:62). Of course, illegal entrants have been and are more severely handicapped than legal entrants by their illegal status, lack of citizenship, and vulnerability to exploitation. On the other hand, they sometimes compete for jobs with those who enter the U.S. legally or those who are natives. Obviously, it is impossible to obtain a reliable estimate of the number of illegal Mexican immigrants to the U.S. Among legal Mexican immigrants in 1970, occupational representation was substantial only in the nonfarm as well as farm laborer categories (North, 1974:17). For example, almost fifteen percent of all immigrants in the U.S. in 1970 were from Mexico, but less than two percent had professional compared to nineteen percent who had held laboring occupations. This pattern contrasts sharply with that found for immigrants from Europe and Asia (North, 1974:71). However, about eighty percent of Mexican Americans enumerated in 1970 were native born.

Like Mexico, Puerto Rico has been beset by severe poverty problems. And the small island's rapid population growth has served to exacerbate such difficulties (Wilber and Back, 1968:142). From 1960-64, its population increased by ten percent, pushing its total to more than two and a half million people. Some of the mounting pressure of Puerto Rico's population has been relieved by migration, most of it to the U.S. mainland, where Puerto Ricans began coming in large numbers after World War II.

Puerto Ricans are the first to come to the U.S. mainland in large numbers from a different cultural background who are also citizens of the U.S., having been granted such for more than fifty years. Most came from depressed areas in Puerto Rico's capital, San Juan, but many were formerly rural to urban migrants within Puerto Rico itself before their move to the U.S. (Wilber and Back, 1968:143). Fewer than half of all Puerto Ricans enumerated in 1970 were born in the United States. Puerto Rican Americans have been referred to as the "newcomers of the aviation age" (Fitzpatrick, 1971:2), exemplifying their airborne mode of migration to New York in particular where they are in fact more numerous than in San Juan. However, the same relative ease that encourages migration to the U.S. also facilitates frequent return migration to the island. Such streams of migration are strongly related to the levels of unemployment both in Puerto Rico and the New York areas.

Different again is the immigration experience of Cubans. As earlier indicated, the majority of Cubans entered the United States as refugees after January 1959; this is reflected in the fact that less than twenty percent of Cuban Americans are native born. Those who left Cuba do not represent a cross-section of the total native Cuban population. Although people from all social classes were among Cuban immigrants to the U.S., a disportionate number came from the middle and upper strata of pre-revolutionary Cuban society, with the very affluent tending to leave first. A disproportionate number also came from Havana and other large cities, while the inhabitants of rural areas (who comprise forty-three percent of Cubas' population) were almost unrepresented (Fagen, Brody, and O'Leary, 1968, see Chapter 2).

Although the middle and upper class selectivity of the Cuban immigrant as well as his or her ability and initiative have contributed to the relative success of the Cuban in America, also significant in this development was the Cuban Refugee Program (CRP). For example, in addition to smoothing the transition from Cuba to the U.S., the financial burden incurred in the education of Cuban refugee children, including the hiring of bilingual secretarial and instructional personnel, was underwritten as part of the CRP. Furthermore, in Miami in the early 1960's, it was an explicit policy not to segregate Cuban refugee children in schools any more than necessary to accelerate acquisition of the English language (Center for Advanced International Studies, University of Miami, 1969:316). It is largely because of the CRP that the foreign born status of most Cuban Americans (over eighty percent) has not been more disadvantageous to their relative assimilation in the U.S.

Summary

Although linked by a common language base and minority status, the Spanish origin population in the U.S. is far from homogeneous. As has been demonstrated here, Mexican, Puerto Rican and Cuban men and women in the U.S. differ from one another on a number of population characteristics, including numbers present, age, sex and family composition, regional distribution, educational attainment, nativity, and immigration experience, all of which have a bearing on labor market standing. There are also some similarities in such characteristics between American Indians and persons of Spanish origin in the U.S., but the differences are expectedly much more in evidence. In sum, this chapter suggests that a deeper appreciation of the differences among America's minorities is necessary to a fuller understanding of their relative labor market achievement in American society.

CHAPTER 3

DISADVANTAGED PARTICIPATION IN THE JOB MARKET

Labor force participation and unemployment are the primary labor market dimensions constituting the focus of this chapter. The approach will for the most part be comparative, deriving from examinations of detailed cross-tabulations involving the use of age-specific labor force participation and unemployment rates (LFP and UR's) and in some cases employment rates (ER's). Yet, at the same time, the perspective will be one of a broad sweep of major labor force influences under the general topic areas of preparation for the labor market, family structure, and immigration and citizenship. Consequently, while the detail presented will be considerable, the results will nevertheless be implicitly pregnant with potentially important additional analyses.

Much is generally known about relationships between labor market participation and such personal characteristics as age, sex, and education. Evidence in this report should reconfirm most of these kinds of observations, although it is not the major concern here. Less well-known is the relative labor market position of Spanish and Native (Indian) Americans, since studies of labor force differentials are too often made on a dichotomous white-nonwhite basis. Hence, while it may be interesting to reconfirm, for example, that employment rates are higher at middle-adult ages than at teen-age or older age levels, attention will be centered on such questions as whether labor force participation and unemployment rates for Spanish and Indian men are higher or lower than those for white and and black men at particular age and/or education levels. Also, labor force participation rates for men are typically higher than those for women, but one of our concerns is whether differences in such rates within age groups are the same or different for Mexican, Puerto Rican, Cuban, and Indian men and women. Where age differences exist, we will want to determine in which groups and under what circumstances they are greatest.

The General Picture

Before launching into the detailed presentation, it is useful to consider the overall employment picture for the various population groups in this report. It should be kept in mind that the figures shown below, based on the 1970 PUS, may differ from published census figures for these same groups in 1970, primarily because of the more restrictive sample constraints imposed in line with the purposes of this study (as discussed in Chapter 1).

	Mexican	Puerto Rican	Cuban	Indian	Black	White
LFPR						
Male	87.4	82.5	90.5	76.0	81.6	88.9
Female	39.1	34.2	55.1	38.8	54.3	46.8
UR						
Male	5.9	5.6	3.9	11.4	5.8	3.3
Female	8.8	8.5	7.3	10.7	7.9	4.7

Closest of the minority populations to the participation and employment levels of white men are Cuban men. In fact, the participation of Cuban men exceeds slightly that of whites. Nearest to white men in participation after Cubans but with about twice the unemployment are Mexican men. Relatively low in levels of participation are Puerto Rican, black and particularly Indian men.

The well-known disadvantaged position of the American Indian in the labor market is mirrored in these figures; among men, they have the lowest overall LFPR and the highest unemployment. Although the approximate 6% unemployment of black, Mexican and Puerto Rican men is about twice that for white men, it is nevertheless only a little more than half the UR for Indian men. And considering that the UR is calculated on the basis of those persons in the labor force and that Indian men are proportionately the least represented in that regard of men in this report, the magnitude of the dismal employment picture for the American Indian is only partially reflected by an already markedly high unemployment figure. Yet, the gloomy employment situation of the American Indian should not function to minimize the substantial employment disparities that also exist between white and Spanish origin and black persons in the United States.

The employment picture for women is one of generally much lower participation and higher unemployment than men. Only Indian women have less unemployment than their male counterparts. However, this difference is a small one, and the about 11% Indian female unemployment exceeds that of all other women. Highest in female participation are blacks and Cubans (54-55%), followed by whites, Mexicans, Indians and lastly Puerto Ricans. Unemployment figures for women do not yield a similar ordering. Clearly lowest female unemployment obtains for white women. Moreover, white female unemployment is lower than for all but white and Cuban men in this report. Unemployment of Cuban women is least among minority women, with black, Mexican and Puerto Rican women closely grouped at the 8-9% unemployment level.

PREPARATION FOR THE LABOR MARKET: EDUCATION AND VOCATIONAL TRAINING

A major handicap's impeding the greater participation of Spanish and Native Americans in the labor market has been their relative lack of educational and vocational training attainment and opportunities. But in addition to a concern for educational inequality, there is the question of inequality between persons with similar education. Consequently, in this section, after a brief review of the overall educational disparities between Spanish and Indian males and females and their white and black counterparts, an examination of age-specific differences in LFP and UR's will be made.

Concern will also be manifested in somewhat similar fashion for an equally important aspect of the educational question, that of vocational training. In recent years, there has been increasing concern expressed for the inadequacies of our modern educational system to meet a sufficient range of varied educational needs, particularly in the area of vocational training. It is now generally recognized that the traditional system of college preparation and liberal arts is not the ideal approach to education. Not only are alternative educations needed to offer individuals greater choice, but our society also needs the valuable services of those with vocational training as much as it does the services of individuals who travel the road to higher education.

Finally, there will also be an attempt to assess the relative positive effects of increasing education and vocational training on labor force participation among the six populations in this study.

Education

Compared to whites, Spanish Americans and Indians in the U.S. are handicapped in the labor market by their lack of education. Although the gap is narrowing at the younger age levels, the median years of schooling for all Spanish origin and Indian persons 25 and over in 1970 were only 9.1 and 9.8, respectively, compared to 12.1 nationally. The educational progress of the Spanish and Indian populations--similar to that of the black--is reflected at the younger ages (See Chapter 2). The gap between Spanish and whites is less than a year at ages 20 to 29, in contrast with a more than three-year difference at ages 50 to 59. A similar pattern obtains in relation to Indians and whites, but with smaller differences at the older age levels than between Spanish and whites.

As noted earlier, the various Spanish American populations are not as educationally homogeneous as might be thought. Cubans differ substantially from the more educationally similar Mexicans and Puerto Ricans. In fact, the percentage of Cubans who have graduated from high school (43.9) is almost twice that of Mexicans (24.2) and Puerto Ricans (23.4), and with one and a half to two years more schooling overall than the latter two groups. Undercutting this educational advantage to some extent is the fact that more than half of the Cuban Americans (and more than three-fourths of Mexicans and Puerto Ricans) have less than a high school education. Moreover, the Spanish populations most educationally disadvantaged of the three--the Mexicans and Puerto Ricans--are those in greatest number.

The following analysis examines population differentials in terms of three educational levels: those individuals with (1) one to seven years of school, (2) four years of high school, and (3) four years of college. Each category is mutually exclusive and does not overlap with any of the other categories. Moreover, individuals in categories outside the limits imposed here, such as those with eight years of schooling, are excluded. For example, those with four years of college are not included among those with four years of high school, and those relatively few individuals with more than four years of college are not included among those with four years of college. In order to retain a high degree of detail in the original data, eight educational categories were used. However, to avoid making this section unduly cumbersome, it was desirable to select on the basis of relative importance and cell frequencies the three categories listed above.

Less than eight years of schooling. Indian men tend with few exceptions to have the lowest age-specific rates of participation among males at this educational level (Table 3.01). In comparison with white men, the differences are great, for example, almost twenty percentage points in one age group (50 to 54), and the same is also only slightly less true when the comparison is Indian with black men. However, at this educational level, age-specific LFPR's are higher for Mexican and Cuban in comparison with white and black men, although rates for Puerto Rican men are slightly higher than but more like those for Indian men.

Highest age-specific UR's among men are found for Indians as well. Remarkably, they have an extremely high rate of unemployment (15.3%) where most other populations show relatively low unemployment (3 1/2-5%)--at the ages of peak participation (35 to 39). Age-specific UR's for Mexican and Puerto Rican men tend to approximate those for white and black men at this educational level. The very high unemployment of teenage males with this little schooling is apparent for each population group.

Lowest participation of the female populations here is found for Indian and Puerto Rican women, with age-specific LFPR's for Mexican and white women slightly higher and Cuban and black women even more so (Table 3.02). Unemployment is greatest for black women for those under 30 years of age; thereafter, joblessness tends to be highest for Indian and Cuban women. Finally, age-specific UR's for men here are generally lower than for women.

Table 3.01. Age-Specific LFP and UR's for Males With One to Seven Years of Schooling, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
14-19	68.0	51.3	40.0	39.1	49.4	52.7
20-24	90.6	87.2	85.7	73.4	79.0	84.9
25-29	91.8	91.5	90.0	72.1	85.8	89.3
30-34	93.3	87.3	93.4	75.2	87.6	90.4
35-39	91.4	87.4	92.0	83.4	90.0	90.2
40-44	93.4	83.9	94.0	77.8	88.7	90.0
45-49	90.3	77.1	93.2	85.2	87.7	87.8
50-54	87.4	73.9	93.7	65.7	82.3	85.1
55-59	82.7	62.3	87.8	63.5	76.7	80.2
60-64	69.1	57.6	74.0	49.7	63.7	65.3
65-69	38.7	17.6	33.8	25.5	33.8	33.3
			Unemployment Rates			
14-19	17.1	18.9	20.0	14.8	19.0	18.7
20-24	7.6	7.9	0.0	16.2	8.4	7.7
25-29	4.2	4.2	5.6	6.8	6.5	6.6
30-34	5.4	5.4	1.7	7.8	3.9	5.3
35-39	4.9	3.4	4.7	15.3	5.2	4.9
40-44	5.5	5.1	0.7	10.9	4.3	4.4
45-49	4.3	4.5	6.4	10.1	4.1	4.3
50-54	4.1	2.4	3.7	9.6	3.8	4.3
55-59	5.2	9.6	6.4	10.7	4.2	4.0
60-64	4.3	0.0	8.8	10.3	4.4	4.4
65-69	9.8	0.0	4.1	11.0	4.4	5.4

Table 3.02. Age-Specific LFP and UR's for Females With One to Seven Years of Schooling, by Age, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
14-19	35.6	25.5	---	22.4	27.0	26.2
20-24	32.1	20.8	42.1	31.2	39.1	32.1
25-29	30.0	22.1	39.5	28.4	43.2	33.7
30-34	31.4	20.9	55.1	24.9	47.0	35.5
35-39	33.9	29.7	60.9	29.3	50.1	38.7
40-44	35.8	30.4	59.4	28.2	49.5	40.8
45-49	36.1	30.8	67.2	30.0	51.2	40.2
50-54	32.9	34.0	50.0	23.6	49.2	39.1
55-59	28.5	23.4	37.4	25.4	45.9	35.8
60-64	20.4	18.2	23.4	21.0	34.8	25.9
65-69	9.6	9.8	8.7	8.7	16.3	11.2
			Unemployment Rates			
14-19	17.4	8.2	---	26.8	31.6	19.7
20-24	13.1	12.5	6.2	13.1	18.9	11.5
25-29	7.7	15.8	6.8	13.7	12.3	10.1
30-34	9.2	13.4	9.3	13.7	9.4	10.1
35-39	11.2	9.8	6.2	11.9	7.6	8.8
40-44	10.1	10.5	13.1	9.2	7.3	6.4
45-49	9.1	7.8	10.9	4.7	6.1	6.0
50-54	7.6	5.9	10.0	13.6	5.1	5.9
55-59	12.6	2.6	10.2	10.2	4.4	5.0
60-64	7.8	0.0	12.8	18.1	5.0	4.3
65-69	7.3	---	10.3	11.5	4.3	7.1

Four years of high school. Among men who are high school graduates, age-specific LFPR's are lowest and age-specific UR's highest for Indians (Table 3.03). The male population most like the Indian but slightly superior in terms of participation is the black. However, unemployment among black men tends to be much less than for Indian men. The largest differentials by age are between Indian and white men on both participation and unemployment. The participation of Cuban is almost the same as that of white men; following Cuban men in order of participation are Mexican and Puerto Rican men.

The situation of Indian men here suggests that increased education for Indian men may not always be paralleled by increased opportunities in the labor market. Although the age-specific LFPR's for Indian men increase at the high school level (see also Table 3.07), age-specific UR's are not consistently lower and in several cases are greater than is true for Indian men with less than eight years of schooling. For example, the respective UR's for Indian men ages 25 to 29 are 9.6 and 6.8--lower at the lower educational level. This situation contrasts with that generally found for the other male populations for which age-specific UR's are higher at the lower educational level.

The pattern among female high school graduates differs in some ways from that found among males. Highest age-specific LFPR's occur for black followed by Cuban women (Table 3.04). White and Puerto Rican women participate least of all through childbearing ages 25-39, but Puerto Rican women do participate at similar levels with Cuban and slightly less than black women at ages 45 to 64. Mexican women participate at or above the levels of white women until about age 54; the same is true generally in relation to Indian women though the pattern is less consistent. Age-specific UR's are lowest for white women.

Four years of college. Consistent with expectations, participation rates at this level of education for men are quite high (Table 3.05). With the exception of Indian men, most of the minority men here with four years of college participate in the labor force to a similar degree as whites. Spanish men appear, on the whole, to participate slightly more than black men.

Black women with college education outparticipate the other female populations, and white and Puerto Rican women participate relatively less than Indian, Mexican, and Cuban women (Table 3.06). Based mainly on whites and blacks, UR's for women as for men tend to be low, although low frequencies in some individual cells render cross-comparisons between several populations unreliable. In no case at any of the three educational levels examined here for particular ages did women participate relatively more than men in the same population.

Table 3.03. Age-Specific LFP and UR's for Males, 20-69, With Four Years of High School,* by Age, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Labor Force Participation Rates						
20-24	91.0	88.8	87.2	78.2	87.6	94.4
25-29	96.5	95.6	96.3	90.5	94.5	97.8
30-34	96.4	95.7	93.1	94.1	94.5	98.1
35-39	96.3	92.9	99.1	91.8	93.8	98.0
40-44	95.6	95.5	96.6	88.5	92.0	97.4
45-49	93.3	92.1	97.2	90.1	91.5	96.7
50-54	93.8	93.7	96.0	88.2	90.4	95.3
55-59	92.1	---	92.5	80.0	86.4	91.8
60-64	87.9	83.3	77.1	79.4	73.2	79.1
65-69	70.0	36.4	57.5	43.9	46.3	45.1
Unemployment Rates						
20-24	8.6	5.7	6.7	13.9	9.1	5.9
25-29	3.7	1.4	2.9	9.6	5.1	3.0
30-34	4.1	3.2	1.1	7.5	3.8	2.1
35-39	1.5	2.7	2.7	11.9	3.7	1.8
40-44	2.6	1.9	0.0	6.9	4.1	1.8
45-49	1.7	4.3	5.8	13.0	3.5	1.9
50-54	3.8	0.0	5.5	7.5	3.2	2.0
55-59	1.5	---	4.1	4.1	3.1	2.1
60-64	0.0	6.6	3.6	8.1	1.6	2.8
65-69	16.7	0.0	0.0	11.2	3.2	4.0

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*Does not include those persons with schooling beyond the high school level.

Table 3.04. Age-Specific LFP and UR's for Females, 20-69, With Four Years of High School,* by Age, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
20-24	59.5	60.3	67.0	55.2	65.7	59.0
25-29	48.6	44.5	62.9	47.9	64.4	42.2
30-34	49.4	42.1	60.5	51.3	64.2	42.9
35-39	51.7	44.3	64.3	50.3	67.1	47.8
40-44	54.1	51.5	64.6	58.2	66.6	53.1
45-49	55.7	61.5	62.4	50.9	67.4	55.6
50-54	55.9	58.3	60.7	57.4	65.8	55.2
55-59	43.9	55.0	48.6	48.1	59.3	51.6
60-64	35.2	55.6	28.1	42.6	52.2	40.8
65-69	24.4	11.1	8.9	28.8	30.8	20.9
			Unemployment Rates			
20-24	8.6	4.8	7.5	10.0	11.4	5.9
25-29	7.2	7.0	6.5	7.3	7.5	4.7
30-34	4.9	9.7	4.3	7.4	6.7	4.0
35-39	4.6	5.9	4.0	8.9	5.7	3.6
40-44	4.8	5.8	9.8	5.8	5.0	3.4
45-49	6.1	3.6	5.3	2.6	3.9	3.2
50-54	4.1	14.2	6.1	7.1	4.3	3.1
55-59	7.3	9.1	17.7	6.4	3.4	3.1
60-64	3.1	10.1	5.3	4.5	3.8	2.9
65-69	0.0	0.0	---	6.6	4.5	4.8

*Does not include those persons with schooling beyond the high school level.

Table 3.05. Age-Specific LFP and UR's for Males, 25-64, With Four Years of College,* by Age, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
25-29	97.6	88.2	94.7	93.9	95.5	97.7
30-34	96.0	100.0	100.0	90.5	98.4	98.7
35-39	97.4	100.0	100.0	90.9	96.1	99.0
40-44	97.4	100.0	100.0	100.0	96.6	98.7
45-49	97.8	100.0	92.9	85.7	95.8	98.3
50-54	100.0	---	96.6	93.8	91.8	96.1
55-59	100.0	---	92.9	---	88.7	93.1
60-64	87.5	---	88.2	92.3	85.4	82.2
			Unemployment Rates			
25-29	2.5	6.6	5.5	3.2	1.7	2.0
30-34	2.8	0.0	3.4	0.0	1.4	1.2
35-39	0.0	0.0	0.0	10.0	2.3	1.0
40-44	2.8	10.0	0.0	5.3	2.6	1.1
45-49	4.0	0.0	15.4	0.0	1.1	1.2
50-54	0.0	0.0	7.1	0.0	0.7	1.5
55-59	0.0	0.0	15.4	---	2.5	1.7
60-64	0.0	0.0	6.6	0.0	2.2	1.7

*Does not include those persons with more than four years of college

Table 3.06. Age-Specific LFP and UR's for Females, 25-64, With Four Years of College,* by Age, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Labor Force Participation Rates						
25-29	69.6	63.2	57.1	63.8	83.7	56.0
30-34	63.3	46.7	67.6	58.8	84.0	42.9
35-39	57.9	44.4	77.8	61.9	85.5	45.7
40-44	51.9	57.1	71.9	61.1	84.6	51.7
45-49	60.0	77.8	81.5	64.3	87.0	56.6
50-54	63.6	50.0	81.8	86.4	82.0	58.7
55-59	70.0	---	78.6	75.0	83.1	57.7
60-64	62.5	40.0	53.8	60.0	62.0	48.9
Unemployment Rates						
25-29	1.7	8.4	0.0	10.0	2.7	2.3
30-34	2.5	14.3	16.0	4.9	2.9	2.8
35-39	9.2	0.0	10.8	0.0	1.4	2.0
40-44	0.0	0.0	0.0	9.0	1.3	2.5
45-49	11.2	0.0	4.5	0.0	0.9	2.1
50-54	0.0	0.0	0.0	5.3	1.2	1.4
55-59	0.0	0.0	0.0	0.0	1.4	1.0
60-64	0.0	0.0	14.1	0.0	2.4	1.4

*Does not include those persons with more than four years of college.

Positive Impact of Education

It is clear overall that increasing education is positively related to labor force participation among both majority and minority men and women. But is it consistently true for each subpopulation? Is it more true in some than in others? Does the positive effect of education interact with age? And is it similar for both sexes?

In order to approach answers to these questions, sex and age-specific labor force participation ratios are presented for each of the populations in Tables 3.07 and 3.08. Ratios are legitimate here because the rates in the same age intervals are free from the effects of the total number of individuals in the interval. The first of these tables compares age-specific LFPR's of persons with less than eight years of schooling to those with four years of high school, while the second compares those with four years of high school to those with four years of college. This approach facilitates an assessment of the relative degree of positive effect of increasing education on LFP. In simple terms, the closer the ratio figure is to 1.00 (or if it is over 1.00), the less the positive effect of education (e.g., .98 or 1.05); the farther removed the figure is from 1.00 in the lower direction, the greater the effect of education (e.g., .65). Of course, if the figure is 1.00 or near that number, education can be viewed as having little if any effect, although in actuality more controls (and in some cases higher frequencies) would be needed to make more forceful statements about the singular effect (or lack of one) of education. Nevertheless, bearing in mind the limitations, a ratio approach can be a useful and insightful technique in this regard.

Grade school-high school comparison. The relative gains in LFP for each of the populations are substantial in comparing those with one to seven years of schooling to those who have graduated from high school, particularly in the case of women (Table 3.07). The positive educational effect is also most noticeable for men at the older work force ages (50+).

Among men, least relative participation gain is found for Mexicans and Cubans with greatest gains obtaining for Indians and Puerto Ricans. The relative gain for whites here, incidentally, while greater than for blacks is less than for Indian and Puerto Rican men.

The pattern for women differs in some ways from that for men. Black women show greater gains with high school education than whites, and Cuban women by far manifest the least relative increase in participation. But Mexican women, in contrast to men, reveal substantial gains (also greater than for white and black women). However, Indian and Puerto Rican women, like their male counterparts, tend to exhibit the greatest

Table 3.07. Ratios of Age-Specific LFPR's for Persons With One to Seven Years of Schooling to Persons With Four Years of High School, by Sex,

Sex and Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
20-24	1.00	.98	.98	.94	.90	.89
25-29	.95	.96	.93	.80	.91	.91
30-34	.97	.91	1.00	.80	.93	.92
35-39	.95	.94	.93	.91	.96	.92
40-44	.98	.88	.97	.88	.96	.92
45-49	.97	.84	.96	.81	.93	.91
50-54	.93	.79	.98	.74	.81	.89
55-59	.90	.98	.95	.79	.89	.87
60-64	.79	.69	.96	.63	.87	.83
65-69	.55	.48	.59	.58	.73	.74
Female						
20-24	.54	.34	.63	.57	.60	.54
25-29	.62	.50	.63	.59	.67	.80
30-34	.64	.50	.91	.49	.73	.83
35-39	.66	.67	.95	.58	.75	.81
40-44	.66	.59	.92	.48	.74	.77
45-49	.65	.50	1.08	.59	.76	.72
50-54	.59	.58	.83	.41	.75	.71
55-59	.65	.43	.77	.53	.77	.69
60-64	.58	.33	.83	.49	.67	.63
65-69	.39	.88	.98	.30	.53	.54

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*Age-specific labor force participation ratio = $\frac{LFPR_i, \text{ed } 1\text{-}7}{LFPR_i, \text{ed } 12}$;

based on data in Tables 3.01 - 3.04.

Table 3.08. Ratios of Age-Specific LFPR's for Persons With Four Years of High School to Persons With Four Years of College, by Sex, 1970*

Sex and Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
25-29	.99	1.08	1.02	.96	.99	1.00
30-34	1.00	.96	.93	1.04	.96	.99
35-39	.99	.93	.99	1.01	.98	.99
40-44	.98	.96	.97	.86	.95	.99
45-49	.95	.92	1.05	1.05	.96	.98
50-54	.94	---	.99	.94	.98	.99
55-59	.92	---	1.00	.80	.97	.99
60-64	1.00	---	.87	.86	.86	.96
Female						
25-29	.70	.70	1.10	.75	.77	.75
30-34	.78	.90	.90	.87	.76	1.00
35-39	.89	1.00	.83	.81	.78	1.05
40-44	1.04	.90	.91	.95	.79	1.03
45-49	.93	.79	.77	.79	.77	.98
50-54	.88	1.17	.74	.66	.80	.94
55-59	.63	---	.62	.64	.71	.89
60-64	.56	1.39	.52	.71	.84	.83

*Age-specific labor force participation ratio = $\frac{\text{LFPR}_i\text{, ed 12}}{\text{LFPR}_i\text{, ed 16}}$;

based on data in Tables 3.03 - 3.06.

relative increases in participation at the increased level of education, (i.e., high school).

High school-college comparison. Partly because of the already fairly high levels of participation at the high school graduate level, gains in participation in comparing high school with college graduates are generally smaller than is true in comparing those with less than high school to those who are high school graduates, particularly for men but also for women (Table 3.08). In fact, at some age levels (e.g., males, 35 to 39), virtually no increase is apparent. Women show larger relative gains than men at the younger (25 to 29) and older (55+) age levels.

Among men, differences between populations are generally small or nonexistent, although the rates for Puerto Rican and black men benefit relatively more than those of Cuban and white men. The pattern for [illegible]en is somewhat mixed, while Mexicans are most like whites [illegible]er age 44 where the relative gain for whites is greater.

Females ages 25 to 29 in each of the populations except the Cuban reveal a sharp increase in participation and to about the same degree for each. Generally, least gain at all ages is evident for whites (except at ages 25 to 29), with the minority populations showing similar patterns of greater gain. Puerto Rican women at some ages (e.g., 35 to 39) evidence little or no gain.

Vocational Training

Does vocational training influence participation in the labor market among the populations in this investigation, and do these populations portray differentials in participation in relation to the presence or absence of vocational training? These are questions to which we now turn our attention.

In the 1970 census, "vocational training" includes formal vocational training programs completed in high school, apprenticeship programs, schools of business, nursing schools, trade schools, technical institutes, training in the Armed Forces, and Job Corps Training. The census definition excludes training in single courses which were not a part of an organized program of study, on-the-job training, training in company schools, training by correspondence, and basic training in the Armed Forces. Persons who reported having completed a vocational training program were asked to name their main field of vocational training. Unfortunately, 1970 census data do not indicate when or where vocational training took place, nor do they designate specific training programs.

Does vocational training make a difference? The same approach that was utilized to assess the positive impact of increasing education on age-specific LFPR's (see Tables 3.07 and 3.08) can also serve to determine the relative impact of vocational training on participation in the labor market among the various populations in this study. It is clear that having vocational training has more effect on the participation of women than men in each of the populations (Table 3.09). Beyond this observation, there are differences among the populations divided by sex.

Among men, Indians experience the greatest relative increase in participation followed by Puerto Ricans. Increases for the other male populations are for the most part not large and do not differ greatly from one another. For women, the positive impact of vocational training is most evident among Puerto Ricans. It is also more apparent for Indian and Mexican than Cuban, black, or white women. Despite the relative differences between the female populations in terms of impact, the increase in participation is substantial in each. Of course, differences in levels of education for each of the population groups undoubtedly affect the apparent positive impact of having vocational training. For example, the higher percentage of white men and women who are high school and college graduates means that comparisons between those with and without vocational training will likely be less in evidence.

With training. Among men with some form of vocational training, white, Cuban, and to a lesser extent Mexican men participate more heavily than Indian, black, and Puerto Rican men (Table 3.10). The especially low relative participation of Indian men with vocational training probably represents in part restricted employment possibilities attendant with their greater rural concentration. Age-specific rates for Puerto Rican men here slightly exceed those for blacks and are substantially greater than for Indians.

In relation to unemployment for men, Indians are again in the least favorable position of the populations. In fact, in contrast to the pattern found in particular for the Spanish male populations, age-specific UR's for Indian and black men with training are sometimes high as those for Indian men without training (See Table 3.12), a situation not unlike that found earlier in comparing unemployment among Indian men with less than eight years schooling to those with four years of high school. Age-specific UR's for those men with training are generally lower for whites than for any of the Spanish populations, although the latter tend to be in a better employment position relative to black and particularly Indian men.

Of women with some form of vocational training, Cubans and blacks participate most heavily (Table 3.11). After age 24, Indian women

Table 3.09. Ratios of Age-Specific LFPR's For Persons Not Having Vocational Training to Persons Having Vocational Training, by Sex, 1970*

Sex and age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
20-24	.99	.97	.88	.91	.97	.97
25-29	.99	.96	.99	.96	.98	.99
30-34	.99	.93	.98	.90	1.00	.99
35-39	.98	.98	.96	.92	.99	.99
40-44	.97	.94	.98	.90	.97	.99
45-49	.97	.90	.99	.88	.96	.98
50-54	.97	.88	.98	.86	.95	.98
55-59	.95	.81	.92	.91	.97	.98
60-64	.93	.90	.98	.79	.90	.95
65-69	.86	.40	.85	.90	.83	.94
Female						
20-24	.63	.55	.69	.69	.76	.79
25-29	.65	.49	.78	.75	.79	.78
30-34	.66	.44	.82	.65	.79	.78
35-39	.67	.52	.84	.66	.81	.81
40-44	.62	.52	.76	.59	.78	.82
45-49	.60	.52	.92	.68	.82	.82
50-54	.67	.65	.81	.58	.79	.80
55-59	.60	.44	.72	.65	.81	.79
60-64	.59	.44	.59	.57	.66	.72
65-69	.58	.44	.41	.50	.66	.70

*Age-specific labor force participation ratio = $\frac{LFPR_{i,nt}}{LFPR_{i,wt}}$;

based on data in Tables 3.10 - 3.13.

Table 3.10. Age-Specific LFP and UR's for Males, 20-69, With Vocational Training, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
20-24	90.1	88.1	97.5	82.6	86.7	93.8
25-29	95.0	95.9	96.7	89.5	92.6	97.4
30-34	95.4	97.4	96.1	91.3	92.1	97.7
35-39	95.5	91.2	98.2	89.3	92.6	97.8
40-44	95.5	93.2	97.7	86.6	92.0	97.2
45-49	93.7	92.6	97.2	86.1	90.6	96.4
50-54	91.1	90.3	96.5	83.1	88.8	95.0
55-59	87.7	83.8	97.0	75.4	81.6	89.8
60-64	74.4	69.2	80.6	68.0	73.4	77.9
65-69	44.9	54.5	57.7	29.2	42.4	42.4
			Unemployment Rates			
20-24	8.8	8.4	9.1	17.9	11.2	5.8
25-29	4.7	3.8	4.3	11.5	6.0	3.0
30-34	4.1	3.8	2.7	8.7	4.3	2.3
35-39	2.8	3.7	1.8	12.2	4.4	2.0
40-44	3.3	4.3	0.5	9.5	4.2	2.2
45-49	3.3	4.0	3.5	10.1	4.0	2.3
50-54	2.9	0.0	2.8	6.5	3.4	2.5
55-59	2.5	3.2	3.2	6.8	3.6	2.8
60-64	1.6	0.0	6.9	4.6	4.5	3.2
65-69	4.2	0.0	3.3	9.6	4.5	5.2

Table 3.11. Age-Specific LFP and UR's for Females, 20-69, With Vocational Training, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
20-24	66.8	64.8	83.6	63.0	72.4	69.4
25-29	56.7	53.2	67.5	53.0	71.0	52.8
30-34	55.5	58.7	64.8	59.7	71.4	51.6
35-39	57.3	59.7	72.7	60.0	72.5	55.2
40-44	63.3	65.0	78.1	72.2	74.2	60.1
45-49	62.2	69.1	71.7	60.0	70.1	61.4
50-54	52.0	59.3	67.4	63.9	69.1	61.6
55-59	48.2	60.5	59.2	52.3	61.4	57.2
60-64	34.1	40.6	43.4	48.8	56.1	46.7
65-69	14.9	23.1	20.0	23.8	27.8	22.6
			Unemployment Rates			
20-24	8.1	6.5	6.3	10.5	10.4	4.8
25-29	5.6	3.9	3.7	7.2	6.8	4.4
30-34	4.5	13.3	5.1	3.5	6.3	3.7
35-39	5.4	3.4	5.8	5.3	5.0	3.3
40-44	5.4	6.2	8.7	7.6	5.0	3.3
45-49	7.6	10.7	4.5	9.8	3.9	3.3
50-54	4.2	2.9	6.2	3.9	4.2	3.2
55-59	6.2	4.3	7.3	2.9	3.6	3.0
60-64	2.3	7.6	13.1	0.0	4.8	3.2
65-69	7.4	33.3	16.5	0.0	4.7	5.3

Table 3.12. Age-Specific LFP and UR's for Males, 20-69, With No Vocational Training, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
		Labor Force Participation Rates				
20-24	89.5	85.1	85.4	75.0	84.3	91.4
25-29	93.9	91.8	95.4	85.5	91.2	96.2
30-34	94.6	90.7	94.5	82.0	92.3	97.0
35-39	93.6	89.4	94.6	81.8	91.6	96.7
40-44	93.4	87.3	95.8	77.9	89.6	96.0
45-49	91.1	83.7	96.4	75.6	87.2	94.9
50-54	88.6	79.8	94.4	71.5	84.4	92.7
55-59	83.2	67.6	89.4	68.4	79.2	88.4
60-64	69.0	62.5	78.9	53.7	66.1	74.1
65-69	38.7	21.6	48.9	26.2	35.1	39.8
		Unemployment Rates				
20-24	9.4	7.3	5.9	15.9	10.6	6.8
25-29	4.6	5.4	3.4	11.3	5.5	3.4
30-34	5.1	5.0	2.4	9.5	4.2	2.6
35-39	4.3	[illegible].1	3.2	12.6	4.0	2.4
40-44	4.6	3.2	3.1	10.5	4.0	2.2
45-49	4.3	5.0	5.3	9.8	3.7	2.4
50-54	4.1	2.1	4.6	7.8	3.8	2.6
55-59	4.7	8.7	4.3	8.2	3.7	2.6
60-64	4.5	0.8	5.8	10.6	3.8	3.2
65-69	9.0	0.0	4.5	7.6	5.1	4.3

participate more than white women, while Mexican and Puerto Rican women ages 25 to 49 also have rates exceeding similar-aged whites. Apparently, white women with training who are in the childbearing ages 25 to 44 are better able to withdraw from the labor market than minority women, although a similar proclivity (of less magnitude) to withdraw in the ages 25 to 34 is present for the other female populations except for blacks. Except among Mexican women, reductions in age-specific unemployment are not consistently found in comparing women without vocational training to those with training. Age-specific UR's for white women with training are for the most part lower than those for the other female populations.

Without training. The lack of vocational training among men appears on the whole to have the least negative impact on the LFP of white men (Table 3.12). This is not surprising in view of the overall greater education of white compared with minority men here. The age-specific LFPR's of Cuban men most nearly approach those of whites ages 25 to 44; from ages 45 to 69, Cuban men participate relatively more than whites. Lowest rates here are for Indian and then black and Puerto Rican men. Mexican men participate near the level of Cuban men until age 45 after which a gap in their age-specific rates is more in evidence.

Age-specific UR's often run higher for men without vocational training compared to those with training, but even among those without training white men show lowest unemployment, again probably in part a reflection of their higher overall education. Cuban men here have generally lowest unemployment of the Spanish populations, with Indian men having by far the highest age-specific UR's.

Age-specific LFPR's for women without vocational training are highest for blacks and Cubans followed by whites, Indians, Mexicans and then Puerto Ricans (Table 3.13). As noted, women with vocational training participate at much higher levels than women who have not had training. Age-specific UR's here are lower for white than for women in any of the minority female populations.

Field of training. Since men tend to receive vocational training in the crafts and trades and women in either business and office work or nursing and health fields (Table 3.14), next examined is how training in these fields relates to population differentials in labor force participation. In addition, age-specific LFP and UR's are given in Table 3.16 for Indian, black, and white men with health-related training. Of men who say they have had vocational training, Indian men, much in contrast to Spanish and also white and black men, have most often (51%) had their

Table 3.13. Age-Specific LFP and UR's for Females, 20-69, With No Vocational Training, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
20-24	42.3	35.7	57.3	43.6	55.0	55.1
25-29	36.8	26.3	52.4	39.9	55.9	41.1
30-34	36.8	26.0	53.0	39.1	56.6	40.0
35-39	38.3	31.3	61.3	39.6	58.8	44.8
40-44	39.5	33.6	59.4	42.9	57.6	49.3
45-49	37.4	35.6	65.9	40.6	57.6	50.3
50-54	34.8	38.3	54.5	36.8	54.5	49.2
55-59	29.1	26.6	42.6	33.8	49.6	45.0
60-64	20.0	18.0	25.5	28.0	37.2	33.7
65-69	8.7	10.1	8.1	12.0	18.3	15.9
			Unemployment Rates			
20-24	10.2	9.8	4.7	14.4	13.6	6.7
25-29	7.9	8.0	8.6	11.5	9.1	5.1
30-34	8.2	7.7	9.4	9.2	8.0	4.8
35-39	8.4	8.6	7.2	10.1	6.5	4.2
40-44	7.8	8.0	9.8	8.4	6.1	4.1
45-49	8.3	5.6	6.7	6.4	5.2	4.0
50-54	7.5	6.8	7.2	9.8	4.6	3.7
55-59	10.0	7.5	9.2	6.8	3.8	3.6
60-64	7.0	7.2	9.0	8.9	4.0	3.9
65-69	8.0	16.8	9.9	8.3	4.9	5.0

Table 3.14. Distributions of Persons With Vocational Training, 20-69, by Sex and Field of Training, 1970*

Sex and field of training	Mexican	Puerto Rican	Cuban	Indian	Black	White
	100.0	100.0	100.0	100.0	100.0	100.0
Male	(4,916)	(1,062)	(1,078)	(2,724)	(18,288)	(240,680)
Bus., office	10.4	14.4	29.8	14.6	8.6	13.3
Health	2.3	2.7	5.7	50.7	2.7	2.1
Trades, crafts	57.1	52.5	33.4	22.0	41.3	50.4
Eng. tech.	7.5	6.2	11.9	3.9	5.7	11.5
Agric. or home ec.	1.8	2.1	1.7	1.3	2.4	3.0
Other field	5.6	4.7	6.7	2.1	4.9	5.4
Not reported	15.3	17.3	11.0	5.5	34.3	14.5
	100.0	100.0	100.0	100.0	100.0	100.0
Female	(2,557)	(688)	(792)	(606)	(16,988)	(128,012)
Bus., office	38.4	46.1	43.2	34.2	26.4	43.8
Nursing, health	18.3	16.6	8.8	26.4	23.2	19.7
Trades, crafts	20.4	15.7	17.1	14.5	13.4	12.7
Eng. tech.	0.9	1.5	2.5	0.8	0.6	0.8
Agric. or home ec.	0.9	1.5	2.5	2.5	2.9	1.5
Other field	3.2	2.6	12.9	3.6	3.3	3.8
Not reported	17.9	16.1	13.1	18.0	30.2	17.6

*Based on PUS data

training in some field of health. Not presented, however, are rates for Cuban men who are relatively heavily concentrated in business and office work (almost 30% of those with training).

It is also worthwhile to note the relative numbers of Spanish men and women with vocational training. Although Puerto Ricans on the mainland outnumber Cubans almost three to one, slightly more Cuban than Puerto Rican men and women have had some form of training (Table 3.14). Moreover, although there are more than eight times as many Mexican than Cuban persons in the U.S., only about five times as many Mexican men and three times as many Mexican women have had training than Cuban men and women, again underscoring the more favorable position of the Cuban population. However, Indian men and women have disproportionately more training than their Spanish counterparts, with the exception of Cuban women.

(1) Men with training in crafts and trades--Participation here is lowest and unemployment highest for Indian men, while the reverse is true for white men (Table 3.15). The participation of Mexican, Puerto Rican, and Cuban men tends to exceed that of black men, although the relative standing of the four populations is less consistent in relation to unemployment. Yet, Mexican and black men ages 30 to 64 show substantially lower unemployment than the average for all men in their respective populations.

(2) Men with training in health--Not only do Indian men with health training participate at much lower levels than black and white men with training in the same category, but the age-specific UR's are in most cases unusually high, both in relation to their field of training and in comparison with white and black men (Table 3.16).

(3) Women with training in business and office work--Participation rates for each of the minority female populations here tend to exceed those of white women, with Cuban and black women participating relatively more than Indian, Mexican, and Puerto Rican women with such training (Table 3.17). Unemployment, however, continues in most instances to be lowest for white women.

(4) Women with training in nursing or other health--Cuban and black women have age-specific LFPR's generally highest among females with health training, although this pattern is more consistently true for black women (Table 3.18). Mexican, Puerto Rican, and Indian women for the most part do as well as or better than white women here. Having health compared to business and office training seems to improve the participation level of Mexican, Puerto Rican, and Indian but not Cuban and black women. Because of some low cell frequencies, it is difficult to assess population differentials by age here. But it would appear that unemployment for women in each of the populations is lower when training is in health than in business and office.

Table 3.15. Age-Specific LFP and UR's for Males, 20-69, With Vocational Training in Crafts and Trades, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Labor Force Participation Rates						
20-24	89.8	89.0	100.0	81.8	88.5	95.3
25-29	96.1	97.1	97.4	87.8	98.4	95.3
30-34	96.7	96.9	96.5	92.1	95.5	98.5
35-39	95.5	86.6	94.5	93.2	94.9	98.4
40-44	96.9	97.6	97.4	86.7	93.8	97.9
45-49	94.0	92.6	97.9	85.1	92.5	96.9
50-54	81.1	90.9	97.6	80.0	90.0	95.6
55-59	91.6	87.5	100.0	76.7	87.3	91.4
60-64	76.5	73.7	81.3	73.1	78.3	78.6
65-69	47.2	54.5	47.4	29.4	53.4	41.9
Unemployment Rates						
20-24	9.3	9.0	6.7	16.0	13.4	5.6
25-29	5.5	3.0	2.6	15.7	6.7	3.0
30-34	4.1	5.3	0.0	6.9	5.1	2.3
35-39	2.1	5.7	0.0	15.9	3.1	2.1
40-44	3.3	4.8	0.0	9.2	3.8	2.1
45-49	2.0	6.0	6.5	19.3	4.2	2.4
50-54	2.7	0.0	5.0	4.5	2.1	2.4
55-59	3.4	7.1	4.8	13.0	4.9	3.1
60-64	1.6	0.0	0.0	0.0	3.5	3.7
65-69	11.7	0.0	0.0	0.0	4.2	6.3

Table 3.16. Age-Specific LFP and UR's for Males, 25-69, With Vocational Training in the Field of Health

Age	Indian	Black	White
	Labor Force Participation Rates		
25-29	90.4	92.3	96.6
30-34	92.0	88.2	97.2
35-39	88.1	95.0	97.5
40-44	85.2	90.3	96.2
45-49	86.5	94.0	96.7
50-54	83.4	93.8	94.0
55-59	77.7	84.0	90.4
60-64	62.5	65.0	82.5
65-69	27.3	---	64.7
	Unemployment Rates		
25-29	10.7	7.3	2.0
30-34	10.8	4.5	1.1
35-39	11.7	3.1	1.6
40-44	10.2	2.4	1.3
45-49	9.4	1.5	1.2
50-54	6.5	2.8	1.8
55-59	5.8	0.0	1.3
60-64	2.9	0.0	1.0
65-69	11.4	---	3.1

Table 3.17. Age-Specific LFP and UR's for Females, 20-64, With Vocational Training in Business and Office Work, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
		Labor Force Participation Rates				
20-24	69.1	70.1	87.3	70.9	74.8	69.0
25-29	57.2	59.1	71.6	54.8	72.7	48.2
30-34	51.3	54.8	68.6	60.8	73.7	47.1
35-39	59.1	63.5	72.6	57.6	77.4	51.8
40-44	65.5	75.0	80.3	66.7	80.3	58.4
45-49	68.5	73.3	80.4	66.7	82.4	61.7
50-54	63.8	60.9	65.2	41.2	80.2	63.1
55-59	66.7	57.1	64.7	64.3	71.9	58.7
60-64	33.3	60.0	---	81.8	62.1	47.8
		Unemployment Rates				
20-24	7.7	4.9	7.2	6.5	9.3	4.6
25-29	6.8	6.1	3.2	0.0	7.0	4.9
30-34	2.9	8.8	2.2	0.0	6.7	4.4
35-39	7.4	5.0	4.4	10.6	5.1	3.6
40-44	5.0	0.0	10.2	15.0	4.9	3.6
45-49	6.4	18.1	2.6	7.2	4.2	3.1
50-54	5.5	7.2	0.0	0.0	5.0	3.0
55-59	3.4	0.0	18.2	11.2	5.2	3.2
60-64	9.9	0.0	---	0.0	4.1	3.4

Table 3.18. Age-Specific LFP and UR's for Females, 20-64, With Vocational Training in Nursing and Other Health, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Labor Force Participation Rates						
20-24	67.5	63.9	66.7	60.9	73.7	74.9
25-29	60.2	62.5	60.0	47.4	56.6	75.5
30-34	66.4	61.5	88.9	78.4	76.3	52.9
35-39	65.6	81.0	77.8	66.7	77.6	57.3
40-44	68.6	70.6	92.3	87.5	82.9	64.4
45-49	63.2	81.3	71.4	71.4	76.6	66.4
50-54	63.2	---	73.3	63.0	77.2	66.5
55-59	68.2	---	---	66.7	71.8	64.4
60-64	38.9	---	---	---	62.0	51.6
Unemployment Rates						
20-24	5.9	4.4	0.0	17.9	8.9	3.2
25-29	4.5	0.0	16.7	5.7	4.1	2.6
30-34	1.2	18.7	0.0	3.4	4.5	2.4
35-39	1.8	0.0	0.0	6.3	4.0	2.1
40-44	4.2	0.0	0.0	0.0	3.5	2.3
45-49	4.3	7.7	9.9	13.3	2.8	2.5
50-54	0.0	---	0.0	5.9	2.4	2.6
55-59	0.0	---	---	0.0	2.7	2.2
60-64	0.0	---	---	---	3.4	1.9

MARITAL STATUS, FAMILY, AND FERTILITY

In this section, concern will be directed toward labor force participation and unemployment differentials in relation to marital status, family structural variables, and fertility. That these factors influence participation in the labor market differentially for working age males and females has long been established. But in addition to examining the extent to which findings here reconfirm general expectations, the focus will also be on age-specific differences and/or similarities and patterns among the various populations, especially those between the white majority and each of the several minority populations.

Marital Status

Does marital status affect LFP among Spanish and Native Americans? Inspection of Tables 3.19 and 3.20 reveals a marked impact: married Spanish and Indian men and never married Spanish and Indian women have higher LFPR's at each of the three age levels than never married males and married females, respectively. Of the Spanish origin populations, LFPR's for married and never married Cuban men tend to be most like those for maritally similar whites and higher than for Mexican and Puerto Rican men.

Controlling for age and marital status, Indian men participate much less than men in any of the other populations. For example, married Indian men ages 35 to 49 have a participation rate near 87%, while the same figure for married white men is more than ten percentage points greater (97.6%). Unemployment among married and especially never married Indian men is very high, again more so than in the other male populations. For instance, the UR for married Indian men ages 35 to 49 is 8.4 compared to 1.8 for whites; the same comparison for those unmarried yields an even larger discrepancy--24.9 and 5.2, respectively. Married white men have a clear employment advantage over most minority men, but this pattern does not obtain for all population-age groups when the comparison is among never married men.

The same general pattern found for Spanish men obtains in relation to the Spanish female populations, except that LFPR's for married Cuban women are more nearly like those of comparable blacks, (and even higher in the 35 to 49 age range), and greater than those for married white women. Among never married females, Puerto Ricans have especially low rates of participation, while LFPR's for Mexicans are slightly higher than for comparable blacks, though lower than for whites. Indian women who are married participate less than white and much less than black women.

Table 3.19. LFP and UR's for Married Persons (Spouse Present), by Sex and Age, 1970

Sex and age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
Male						
14-34	96.0	93.6	97.5	89.6	95.2	98.1
35-49	94.8	89.8	97.2	86.7	93.9	97.6
50-69	77.3	70.6	86.4	64.9	76.1	80.8
Female						
14-34	32.1	29.3	49.1	36.8	54.9	39.2
35-49	35.7	36.6	61.5	39.0	57.6	45.7
50-69	22.4	30.4	40.6	29.6	41.4	34.9
			Unemployment Rates			
Male						
14-34	4.6	4.9	3.3	8.3	4.5	2.6
35-49	3.6	3.6	3.0	8.4	2.9	1.8
50-69	4.4	2.8	3.5	6.6	3.4	2.6
Female						
14-34	8.7	8.9	6.5	10.9	9.2	6.0
35-49	7.0	7.7	7.6	8.2	5.2	3.9
50-69	7.6	9.2	6.9	7.1	4.1	4.0

Table 3.20. LFP and UR's for Never Married Persons, by Sex and Age, 1970

Sex and age	Mexican	Puerto Rican	Cuban	Indian	Black	White
		Labor Force Participation Rates				
Male						
14-34	77.4	65.4	71.1	63.3	68.5	63.3
35-49	80.2	79.3	89.9	61.4	76.9	84.0
50-69	55.6	67.8	68.1	50.3	55.0	62.8
Female						
14-34	63.9	50.3	75.9	50.8	57.0	78.3
35-49	66.9	49.2	85.2	53.6	65.3	79.4
50-69	44.3	38.5	46.0	41.6	52.4	63.2
		Unemployment Rates				
Male						
14-34	14.1	12.5	7.2	22.9	14.8	9.7
35-49	9.5	9.2	5.1	24.9	8.5	5.2
50-69	4.1	5.0	12.5	7.2	5.1	5.4
Female						
14-34	10.5	9.9	4.5	15.4	14.6	5.8
35-49	5.2	6.9	6.6	3.9	5.7	2.4
50-69	6.5	6.8	3.9	4.8	3.5	2.5

at similar age levels. Among unmarried women, Indians participate less than any of the female populations with the exception of the Puerto Rican.

UR's for white are lower than for minority women regardless of marital status, with the exception of never married Cuban women ages 14 to 34. In comparing employment of married men and women, men have the distinct advantage in each of the population groups. But among the never married, women appear more often to be in the more favorable unemployment situation. This is highlighted by the ratios in Table 3.21 which provides for participation and unemployment comparisons by marital status between sexes. It also demonstrates that LFPR's are much more similar for men and women in each of the populations when the comparison is between never married rather than married persons.

Household Relationship

In relation to LFP, two important roles in the household are head of household (HOH) and wife of head. A general expectation would be that the occupancy of these roles will exert opposite influences on the level of participation. The head of the household is expected to be a "breadwinner" and the wife a "housewife" by traditional standards. Consistent with these traditional expectations, HOH's regardless of sex should experience greater pressure to find work. Such pressure is probably more often stronger in the case of male than female HOH's. Wives, on the other hand, should be generally less inclined to enter the labor force, although because of differing subcultural norms and varying employment opportunities and economic pressures on families in some segments of the population, noticeable differences between populations should emerge. An interesting situation is that of many Cuban women whose husbands were not able to accompany them and their families to the states. As a result, many of them have had to assume the burden of providing for the family despite the fact that it was a role to which many of them were previously unaccustomed.

Among Spanish males, Cuban HOH's have the highest age-specific LFPR's comparable at times to those for white male HOH's, and are followed closely by Mexicans until about age 45 (Table 3.22). LFPR's for Puerto Ricans drop heavily with increasing age; their rates after age 40 are less than 90%, while age-specific LFPR's in excess of 90% are found for Mexicans up until age 55 and for Cubans to age 60. Age-specific UR's are lower for Cuban than for Mexican and Puerto Rican HOH's below age 45, but generally higher than for whites at all ages and than for blacks in the 45+ age range.

Among male HOH's, Indian men have the lowest age-specific LFPR's and the highest age-specific UR's of the male populations. The largest discrepancies

Table 3.21. Ratios of Female to Male LFP and UR's, by Age and Marital Status, 1970*

Marital status and age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Ratios of Labor Force Participation Rates						
Married						
14-34	.33	.31	.50	.41	.58	.40
35-49	.38	.41	.63	.45	.61	.47
50-69	.29	.43	.47	.46	.54	.43
Never Married						
14-34	.83	.77	1.07	.80	.83	.97
35-49	.83	.62	.95	.87	.85	.95
50-69	.80	.57	.68	.83	.95	1.01
Ratios of Unemployment Rates						
Married						
14-34	1.89	1.82	1.97	.76	2.04	2.31
35-49	1.94	2.14	2.53	1.02	1.79	2.17
50-69	1.73	3.29	1.97	.93	1.21	1.54
Never Married						
14-34	.74	.79	.63	1.49	.99	.60
35-49	.55	.75	1.29	6.38	.67	.46
50-69	1.59	1.36	.31	1.50	.69	.46

Table 3.22. Age-Specific LFP and UR's for Male Heads of Households, 20-69, 1970

	Mexican	Puerto Rican	Cuban	Indian	Black	White
Labor Force Participation Rates						
20-24	95.5	91.6	96.4	89.0	93.6	96.8
25-29	96.8	94.8	98.0	91.2	95.1	98.3
30-34	96.2	93.7	96.7	89.8	95.1	98.4
35-39	95.3	90.3	95.7	87.9	94.2	98.1
40-44	95.0	89.2	97.2	84.7	92.7	97.4
45-49	92.8	86.3	97.7	82.9	90.8	96.4
50-54	90.4	82.2	95.8	79.5	88.0	94.4
55-59	85.2	70.1	94.3	73.0	82.3	89.8
60-64	71.9	63.7	83.2	57.2	69.7	76.1
65-69	40.6	29.2	60.5	27.7	37.9	41.3
Unemployment Rates						
20-24	5.8	5.7	2.8	9.1	6.6	3.6
25-29	3.7	4.9	3.2	7.8	4.4	2.4
30-34	4.1	4.5	2.5	6.8	3.6	2.0
35-39	3.8	3.8	2.5	10.2	3.6	1.9
40-44	4.1	3.3	1.7	8.0	3.4	2.0
45-49	3.8	4.4	5.2	8.2	3.3	2.1
50-54	3.7	1.4	3.9	6.4	3.4	2.3
55-59	4.1	7.3	4.5	7.1	3.4	2.6
60-64	3.9	0.8	6.7	8.4	3.7	3.0
65-69	9.4	0.0	2.6	6.9	4.5	4.4

are found in comparison with white male HOH's. Much more than among other men, Indian male participation declines steadily after age 25, although a similar pattern also occurs among Puerto Rican men.

Among Spanish origin women, labor force rates are generally higher for HOH's than for wives (Table 3.23 and 3.24); the main exception is among Puerto Ricans for whom age-specific LFPR's for HOH's are already so low. Cuban women again lead the way in participation in both household categories. In fact, as wives, the participation of Cuban women consistently exceeds that of white and is similar to that of black wives. Among HOH's, Cuban women participate more than most black women regardless of age and more than white women from ages 30 to 44; outside that range, they participate at lower levels than whites.

Perhaps related to their lower age-specific LFPR's, UR's for young Puerto Rican female heads (ages 25 to 34) are lower than for all but comparable white women. However, the same cannot be said of Puerto Rican wives. Among Spanish female HOH's, unemployment appears relatively greater for Mexican and Cuban than Puerto Rican women. As a whole, age-specific participation rates are lower and age-specific UR's higher for Spanish female HOH's compared with Spanish male HOH's. Unemployment among Spanish wives in comparison with Spanish female HOH's is more likely to be lowered for Mexican and Cuban than Puerto Rican women. Yet, unemployment among Spanish wives is not invariably greater among Puerto Rican women.

In comparison with other female HOH's, Indian women at each age level participate less, with the notable exception of Puerto Rican women. As is true for white women, Indian female HOH's highest participation (about 58%) occurs in the 20 to 24 age interval. However, peak participation tends to occur after age 30 for the other female populations in relation to being HOH. UR's for Indian female heads are higher than for white women and higher in most cases than for black women. Indian women who are HOH's participate much less than Indian men in the same role; UR's do not consistently favor either Indian men or Indian women. As expected, Indian women who are wives participate less, but not always, with lesser relative unemployment than Indian women who are HOH's. Compared to other wives, Indian women participate slightly more than Mexican and Puerto Rican, less than Cuban and black females, and about the same as white women ages 25 to 34. Age-specific UR's for Indian are greater than for white and black wives.

Family Size

Common sense might logically suggest that the larger the family size, the greater the pressure on the breadwinner to be in the labor market and employed. But whether such pressure translates into greater labor

Table 3.23. Age-Specific LFP and UR's for Female Heads of Household, 20-64, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
20-24	59.2	31.3	73.9	58.1	56.6	83.1
25-29	61.7	24.3	78.8	52.1	59.1	79.3
30-34	60.7	28.9	89.2	56.0	60.8	76.0
35-39	61.0	36.3	85.9	57.8	64.0	77.8
40-44	60.6	40.0	82.6	56.5	65.4	78.3
45-49	62.6	38.9	78.7	50.5	66.5	78.7
50-54	51.4	43.2	73.6	45.0	65.3	76.1
55-59	47.9	31.9	60.6	42.2	59.8	71.1
60-64	31.9	22.5	45.5	38.2	46.3	54.3
			Unemployment Rates			
20-24	7.9	9.3	5.8	7.1	12.0	4.1
25-29	8.6	6.2	7.7	14.2	8.8	3.9
30-34	8.4	5.2	10.3	6.8	8.8	3.7
35-39	10.3	9.1	6.5	11.6	6.5	4.3
40-44	11.2	3.8	8.5	8.5	6.5	3.8
45-49	8.1	6.2	6.2	5.7	4.9	3.5
50-54	5.1	1.6	3.8	9.1	4.4	3.3
55-59	9.2	8.2	16.3	7.3	3.7	3.2
60-64	5.6	5.3	12.1	9.9	4.6	2.8

Table 3.24. Age-Specific LFP and UR's for Wives of Heads of Household, 20-64, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
20-24	32.4	32.3	51.5	38.7	53.8	46.2
25-29	32.5	28.0	47.8	36.5	56.9	35.9
30-34	33.7	28.2	50.1	37.8	57.8	36.8
35-39	35.4	34.4	59.4	36.3	58.6	41.8
40-44	37.1	35.7	60.2	41.6	57.5	46.8
45-49	34.5	41.7	65.0	39.1	56.4	48.0
50-54	31.3	37.8	54.7	37.8	52.0	46.3
55-59	24.1	32.2	43.3	32.5	45.8	39.9
60-64	15.6	21.9	39.0	24.3	36.2	27.7
			Unemployment Rates			
20-24	9.6	9.0	5.8	13.7	11.0	6.6
25-29	8.0	5.4	5.0	8.2	7.9	5.2
30-34	7.4	11.3	7.6	7.7	6.3	4.6
35-39	6.8	6.7	6.6	8.8	5.7	4.0
40-44	6.5	9.5	9.1	8.7	5.3	4.0
45-49	7.8	7.0	5.7	6.9	4.8	3.7
50-54	7.7	9.3	8.2	7.9	4.7	3.7
55-59	9.1	7.1	2.5	6.8	3.9	3.5
60-64	5.8	7.8	7.2	7.0	3.4	3.9

market participation is affected by a host of factors. Moreover, the characteristics of individuals having or being members of large families are often different from those of smaller ones.

In the following analysis, LPF and UR's are examined for male and female heads of families or subfamilies in terms of family size. These persons are not necessarily also HOH's; because more than one family may live in a household, the number of families or subfamilies exceeds the number of households in the U.S. Moreover, multiple family households may be more characteristic of some of the populations in this study than is true for the population as a whole. A restricted age range, 30 to 44, is used here because of low cell frequencies for female heads in some of the minority populations outside that range.

In general, the singular effect of family size on the LFP and unemployment of men in this study appears to be minimal, although the tendency for participation to be greater and unemployment lower is more characteristic of families of six or less. Such a pattern is most apparent for Indian men here (Table 3.25). However, the relationship tends to be curvilinear in most cases, that is, the participation rates within age intervals increase with family size to a point--a point that varies by population-age group--and then decline. Among men with large families, whites are more likely than either Spanish, Indians, or blacks to be in the labor force. Lowest participation rates are found for Puerto Rican and Indian men with large families (seven or more); highest UR's occur for comparable Indian men, with lowest UR's of those with large families found mainly for whites. The pattern for Indian men shows that age-specific LFPR's increase in going from two to four family members, but thereafter begin to decline. Despite age and family size controls, LFPR's are generally lowest for Indian men, with the participation level of Puerto Ricans here sometimes falling to that of Indian men.

The female pattern differs from that for males. Age-specific LFPR's are for the most part negatively related to family size, particularly in the case of Mexican, white, and black women (Table 3.26). Indian women who are family heads reveal a LFP pattern that relates to the interaction of age and family size. From ages 30 to 34, highest participation is with a family size of three to four with sharp declines thereafter. From ages 35 to 39 and then 40 to 44 at the same family size level, there is much less decline and, in some instances, an increase in the relative level of participation. Presumably, this reflects in part the presence at the older female head age levels of older children in the home who are in less need of constant care.

Age-specific LFPR's for Indian women tend to be lowest and those for white women highest of the female populations, followed in order by Mexican and black women. However, there are exceptions to this pattern. For example, the highest labor force figure among female heads ages

Table 3.25. Age-Specific LFP and UR's for Male Heads of Families or Subfamilies, 30-44, by Family Size, 1970

Age and family size	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
30-34						
Two	95.1	95.7	96.0	89.4	93.4	97.2
Three	96.9	96.3	96.7	88.2	94.8	98.4
Four	96.7	94.3	96.0	90.8	96.2	98.9
Five	97.7	93.4	97.4	93.6	97.0	98.8
Six	96.6	95.9	96.8	88.7	96.3	98.6
Seven or more	94.9	86.8	100.0	87.4	94.1	97.5
35-39						
Two	94.0	92.6	100.0	79.8	92.9	96.2
Three	97.3	87.5	97.7	92.2	95.9	97.9
Four	97.1	94.7	95.2	94.1	94.8	98.5
Five	96.2	93.0	94.2	93.2	94.6	98.6
Six	95.6	88.6	98.1	89.3	95.4	98.5
Seven or more	93.6	83.5	95.0	85.6	94.9	97.6
40-44						
Two	93.8	83.0	94.4	80.7	90.9	94.9
Three	93.6	88.3	99.1	87.1	93.7	97.5
Four	97.5	96.6	99.3	89.5	95.3	98.4
Five	98.0	94.7	94.1	89.9	94.3	98.2
Six	96.1	88.7	95.7	86.6	94.5	97.9
Seven or more	93.8	81.6	95.9	81.1	92.5	97.4
			Unemployment Rates			
30-34						
Two	6.2	3.4	2.1	3.9	5.0	2.8
Three	5.3	5.2	2.4	3.7	3.1	1.9
Four	3.3	5.1	3.3	5.9	2.8	1.6
Five	3.8	5.4	2.6	7.4	3.1	1.7
Six	3.7	1.7	---	3.8	2.8	2.3
Seven or more	4.8	6.0	4.2	10.9	4.2	3.3
35-39						
Two	6.0	2.7	2.4	13.4	3.5	2.8
Three	4.0	3.9	3.5	8.5	2.6	2.2
Four	2.3	2.7	1.8	7.1	2.2	1.6
Five	2.0	4.8	3.1	5.2	2.9	1.6
Six	2.2	2.0	---	11.1	2.7	1.6
Seven or more	6.0	4.6	5.3	13.8	4.1	2.7

Table 3.25. Continued

Age and family size	Mexican	Puerto Rican	Cuban	Indian	Black	White
40-44						
Two	2.8	2.3	1.9	9.9	4.5	2.8
Three	3.3	3.3	1.8	5.6	3.0	1.8
Four	3.5	2.9	2.6	4.2	2.4	1.5
Five	4.0	3.7	---	6.1	2.3	1.5
Six	3.7	3.5	2.2	5.7	3.0	1.5
Seven or more	4.6	2.7	2.1	9.9	3.0	2.4

Table 3.26. Age-Specific LFP and UR's for Female Heads of Families or Subfamilies, 30-44, by Family Size, 1970

Age and family size	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
30-34						
Two	68.4	46.2	82.6	55.8	73.3	80.3
Three	58.2	43.3	81.5	67.4	68.3	73.1
Four	58.8	31.5	---	61.5	63.2	65.8
Five	56.9	13.8	---	30.3	53.8	60.2
Six	47.1	18.2	---	44.4	45.8	51.7
Seven or more	37.1	6.8	---	13.8	42.9	45.3
35-39						
Two	74.5	54.3	91.7	77.8	75.7	81.2
Three	61.8	48.5	81.3	56.4	72.7	78.7
Four	67.3	31.5	78.6	59.3	63.7	72.1
Five	52.8	25.0	70.0	33.3	61.1	69.0
Six	39.4	13.6	---	52.0	55.5	64.2
Seven or more	42.7	13.2	---	39.1	44.3	49.2
40-44						
Two	71.1	55.6	85.3	58.1	74.2	80.8
Three	71.4	33.3	66.7	62.1	70.0	75.4
Four	57.3	36.4	70.0	51.6	68.3	72.7
Five	54.2	37.0	---	33.3	57.8	68.1
Six	46.2	25.0	---	66.7	51.6	64.6
Seven or more	36.1	12.0	---	40.5	47.7	50.6
			Unemployment Rates			
30-34						
Two	5.6	0.0	10.5	3.6	6.7	4.2
Three	13.2	7.6	0.0	10.2	7.8	4.1
Four	14.1	13.0	---	12.5	11.5	4.8
Five	4.7	0.0	---	---	11.5	7.2
Six	0.0	0.0	---	16.7	8.8	5.7
Seven or more	11.3	0.0	---	25.4	13.9	5.8
35-39						
Two	7.2	0.0	0.0	14.3	4.9	3.2
Three	7.1	9.1	7.7	---	4.5	4.4
Four	12.8	23.5	9.2	6.2	7.6	5.4
Five	15.9	12.4	14.3	11.1	8.3	6.6
Six	11.7	0.0	---	7.7	13.7	7.6
Seven or more	19.4	20.5	---	22.3	7.8	8.3

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Table 3.26. Continued

Age and family size	Mexican	Puerto Rican	Cuban	Indian	Black	White
40-44						
Two	8.7	5.0	13.8	7.9	4.9	3.7
Three	3.8	11.5	8.4	16.7	6.1	3.9
Four	14.8	0.0	0.0	0.0	4.2	3.7
Five	15.5	0.0	---	0.0	7.7	4.6
Six	25.1	0.0	---	8.4	14.0	4.0
Seven or more	8.6	0.0	---	17.8	10.3	4.2

40 to 44 in a family of six is for Indians (66.7%). There is no apparent relationship between family size and age-specific UR's for any of the minority female populations; nor are population differentials by age consistent. However, among white female heads, unemployment tends to increase with family size. This may suggest that a similar pattern might also be present among minority women, one which does not emerge because of relatively low frequencies in some of the cells here. Finally, male heads in each of the populations participate at higher levels and with generally less unemployment than female heads of families or subfamilies at each of the age and family size levels.

Family Type: Husband-Wife Families and the Presence of Children Under 18

Family size as a variable tells little about the composition of the family unit, for example, whether a given family size is the product of an extended family, young children, or some combination of various kin. In fact, the relative lack of patterns noted for males earlier in relation to family size may be the result of the variable's rather diffuse character. Therefore, it is also important to examine the family compositional influence on LFP and unemployment. Particularly important in this respect are children in the school and pre-school ages.

The ensuing analysis is concerned only with husband-wife families. With respect to the husbands, it should be noted that they may be heads of families or subfamilies rather than strictly family heads as was true also in the previous discussion on family size. The main influence expected here, however, is the presence or absence in the home of the couple's own child, or children, under 18 years of age. A further refinement of the impact of young children on the LFP of women will be presented a bit later in an examination of the presence and number of children in the home under six years of age as well as the more general fertility variable, children ever born. It is expected that the presence of children will "push" more male heads into the labor force and remove or discourage the entry of wives of heads. Moreover, earlier indications should sensitize us to the fact that not only LFP but also unemployment may be affected by the presence of children under 18 in the home for both sexes.

Of the male populations, age-specific LFPR's are highest for white men when children under eighteen are present but highest for Cuban men when they are not (Tables 3.27 and 3.28). Cuban and white men also participate consistently higher than the other populations regardless of the presence of children. Generally lowest here are Indian men under both conditions and Puerto Ricans with and blacks without children present. Of those with children, Mexican men participate more than Puerto Ricans while the reverse is true for those without children. Rates for Puerto Rican men experience very little if any increase under the children-present condition.

Table 3.27. Age-Specific LFP and UR's for Husbands, 14-59, in Husband-Wife Families in Which Own Children Under 18 Are Present, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
			Labor Force Participation Rates			
14-19	67.2	46.7	43.4	53.3	55.7	68.1
20-24	90.8	87.5	94.4	78.7	88.6	93.8
25-29	95.8	93.4	97.9	90.7	94.9	98.3
30-34	96.3	93.9	96.8	89.9	95.5	98.6
35-39	95.3	90.3	95.9	89.4	95.4	98.3
40-44	95.5	90.0	96.8	85.8	94.0	98.1
45-49	93.0	87.3	97.5	84.8	92.9	97.2
50-54	90.0	77.7	96.4	78.7	89.6	95.7
55-59	85.3	66.0	92.6	70.4	82.9	91.5
			Unemployment Rates			
14-19	18.9	15.8	12.0	23.1	18.5	13.0
20-24	8.5	6.4	4.7	13.2	8.9	6.0
25-29	4.1	5.2	4.2	9.3	4.5	2.6
30-34	4.0	4.7	2.4	7.1	3.3	1.9
35-39	3.6	3.8	2.7	10.1	3.0	1.7
40-44	4.0	3.6	2.0	7.3	2.8	1.6
45-49	2.8	5.2	6.2	8.1	2.8	1.8
50-54	4.4	1.5	3.2	8.4	2.9	2.2
55-59	4.9	11.4	3.3	6.7	3.7	2.3

Table 3.28. Age-Specific LFP and UR's for Husbands, 14-59, in Husband-Wife Families in Which Own Children Under 18 Are Not Present, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
		Labor Force Participation Rates				
14-19	78.5	78.0	88.9	58.2	66.4	81.8
20-24	90.6	87.7	88.0	80.7	86.5	92.0
25-29	93.6	93.9	95.6	86.0	92.2	95.1
30-34	89.0	92.2	94.4	78.8	90.5	94.3
35-39	86.4	91.1	98.4	81.6	89.6	92.9
40-44	92.2	90.2	98.7	76.9	89.9	93.9
45-49	93.0	88.1	98.5	81.3	88.9	95.1
50-54	90.7	91.0	95.9	81.2	88.4	94.2
55-59	87.0	70.6	93.5	71.3	84.4	90.4
		Unemployment Rates				
14-19	12.2	10.9	4.2	17.4	16.4	10.4
20-24	10.2	8.6	8.3	17.0	10.2	6.2
25-29	5.8	2.3	4.7	13.7	5.8	3.8
30-34	7.1	4.7	2.9	9.6	4.8	3.9
35-39	7.6	3.3	3.3	19.1	4.6	3.7
40-44	3.9	1.1	4.0	10.9	4.0	3.0
45-49	4.1	3.7	2.3	9.5	3.4	2.4
50-54	2.3	2.3	1.8	5.4	3.3	2.3
55-59	3.7	5.9	3.2	7.5	3.2	2.3

Age-specific UR's tend to be higher when children are not present than when they are for each of the male populations with the possible exception of Puerto Rican men. Highest unemployment regardless of condition is among Indian men, especially in the younger age categories, while lowest is found for white men. From ages 30 to 44, UR's are also usually higher for Mexican and Puerto Rican than for Cuban and black men with children, while Puerto Rican along with Cuban men without children more often have lower unemployment than Mexican and black men, especially for ages 20 to 39.

Puerto Rican, Indian, and Mexican women tend to participate less at each age level than black, Cuban, and, to a lesser degree, white women who have children under 18 in the home (Table 3.29). However, white women ages 25 to 29 participate less than any of the other female populations except the Puerto Rican. Most of the populations here show a tendency toward declining participation in the 20 to 34 age range with two notable exceptions--Indians and blacks.

When children are not present, participation rates are predictably higher for women in each of the populations (Table 3.30). But rates at each age level are generally higher for white, black, and Cuban than for Mexican, Puerto Rican, and especially Indian women. Age-specific UR's for women are generally higher in the children-present condition, particularly when the comparison is among women under 30 years of age. With children present, unemployment is especially severe among young (ages 14 to 24) Indian, black, and Mexican women, although at the later ages Puerto Rican and Cuban women do not appear to be any better off employment-wise. While differences among female minorities here are generally not large, differences between minority and white women are more apparent, regardless of children. Among women without children under age 18 in the home, UR's with few exceptions are lowest for whites. With increases in age, particularly after age 25, black women without children present show improved unemployment in comparison with other minority women that includes a decline in UR's.

Fertility

Up to now in this report, comparisons have been made between populations for both, and in some cases between, sexes. But at this juncture, it is reasonable to limit discussion to female comparisons. In addition to marital status, household relationship, and the presence or absence of children under eighteen years of age in the home, two other variables available in the census are appropriate in a consideration of the LFP of women--children ever born (CEB) and, by way of more refinement in terms of the effect of having pre-school youngsters, the presence and number of children in the home under six years of age.

Table 3.29. Age-Specific LFP and UR's for Wives, 14-59, in Husband-Wife Families in Which Own Children Under 18 Are Present, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Labor Force Participation Rates						
14-19	40.2	30.2	49.1	30.3	37.6	48.1
20-24	38.5	33.1	53.0	37.2	54.4	38.9
25-29	31.2	24.8	45.9	36.3	55.1	29.8
30-34	33.2	26.5	48.8	36.9	56.5	34.6
35-39	34.7	32.7	57.2	35.9	57.2	40.0
40-44	35.2	29.6	57.6	38.5	55.7	43.7
45-49	30.6	34.9	60.6	35.0	54.0	43.8
50-54	27.9	32.5	46.5	31.6	45.4	42.1
55-59	21.4	21.6	32.9	25.5	40.6	37.1
Unemployment Rates						
14-19	16.7	12.9	7.3	26.7	24.5	11.7
20-24	11.4	7.6	6.8	17.2	12.8	8.5
25-29	7.7	6.0	6.3	9.9	8.5	6.2
30-34	7.2	10.6	8.8	7.3	6.6	4.8
35-39	7.2	6.4	7.2	9.5	5.7	4.2
40-44	7.1	8.1	10.1	9.1	5.5	3.8
45-49	8.2	7.4	7.8	7.1	5.0	3.9
50-54	10.8	7.7	8.6	2.5	5.6	3.8
55-59	13.6	---	12.5	2.7	3.9	4.0

Table 3.30. Age-Specific LFP and UR's for Wives, 14-59, in Husband-Wife Families in Which Own Children Under 18 Are Not Present, 1970

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
		Labor Force Participation Rates				
14-19	42.1	38.1	62.7	30.1	44.8	58.1
20-24	58.8	61.4	76.4	55.5	68.2	76.6
25-29	62.6	65.1	76.8	49.7	72.0	75.1
30-34	59.9	55.2	69.2	46.0	68.9	70.3
35-39	55.4	51.9	86.2	43.2	66.0	64.6
40-44	50.7	55.2	70.5	52.1	62.0	59.6
45-49	44.9	50.3	70.0	45.6	59.1	53.9
50-54	35.7	42.3	58.7	40.8	55.1	48.4
55-59	25.0	32.7	43.3	35.7	46.3	40.5
		Unemployment Rates				
14-19	15.2	7.1	3.0	12.0	22.7	11.7
20-24	7.5	7.5	5.6	12.1	10.7	5.1
25-29	5.8	7.1	5.5	5.6	7.6	3.7
30-34	5.5	16.1	1.9	8.5	6.5	3.6
35-39	7.2	9.6	8.0	5.8	6.0	3.6
40-44	4.5	12.5	8.8	8.1	5.5	3.9
45-49	8.0	7.6	5.4	5.7	4.4	3.7
50-54	5.3	9.5	7.3	11.5	4.3	3.7
55-59	7.2	8.0	2.8	7.3	3.8	3.4

Children ever born (CEB). Of women who have never had children, rates for Cubans, blacks and whites are greater than for Mexicans, Indians, and Puerto Ricans (Figure 3.01). However, for women with one or two CEB, white women participate closer to the level of the latter populations though consistently above Puerto Rican women. Although Cuban women participate relatively more than black women under the no CEB condition, the reverse is true under the one and two CEB conditions, particularly in the 20 to 40 age range. Of women with two CEB, young Indian women (20 to 35) have rates superior to young white, Mexican, and Puerto Rican women.

Presence and number of related children under six years of age. This variable has been noted to be inversely related to the participation of women in general. As expected, it also similarly affects each of the female minority (in addition to the white) populations at each of the five year age levels between ages 20 to 39 and does so in a progressively declining fashion (Table 3.31). The magnitude of that decline, however, is not the same for each population. From ages 20 to 29, blacks are generally least and Puerto Ricans most negatively affected with white, Mexican, and Cuban women slightly more affected than Indian women; from ages 30 to 39, rates for Indian women appear to be least relatively reduced with black and Cuban women not far behind. At given age and number of children under six levels, black, Indian, and Cuban women usually participate more than white, Mexican, and Puerto Rican women.

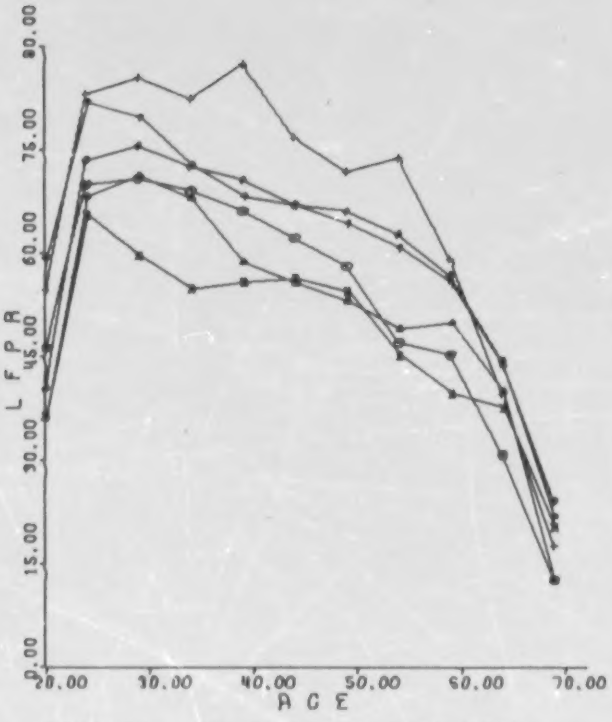
IMMIGRATION AND CITIZENSHIP

Throughout much of American history, immigrants to the U.S. have experienced discrimination in addition to other disadvantageous factors related to being recent arrivals, such as the language handicap. Since a sizeable number of persons of Spanish descent have been immigrants to the U.S. (see Chapter 2), when they immigrated, at what age, and whether or not they have attained citizenship are important factors related to their employment possibilities that are examined here.

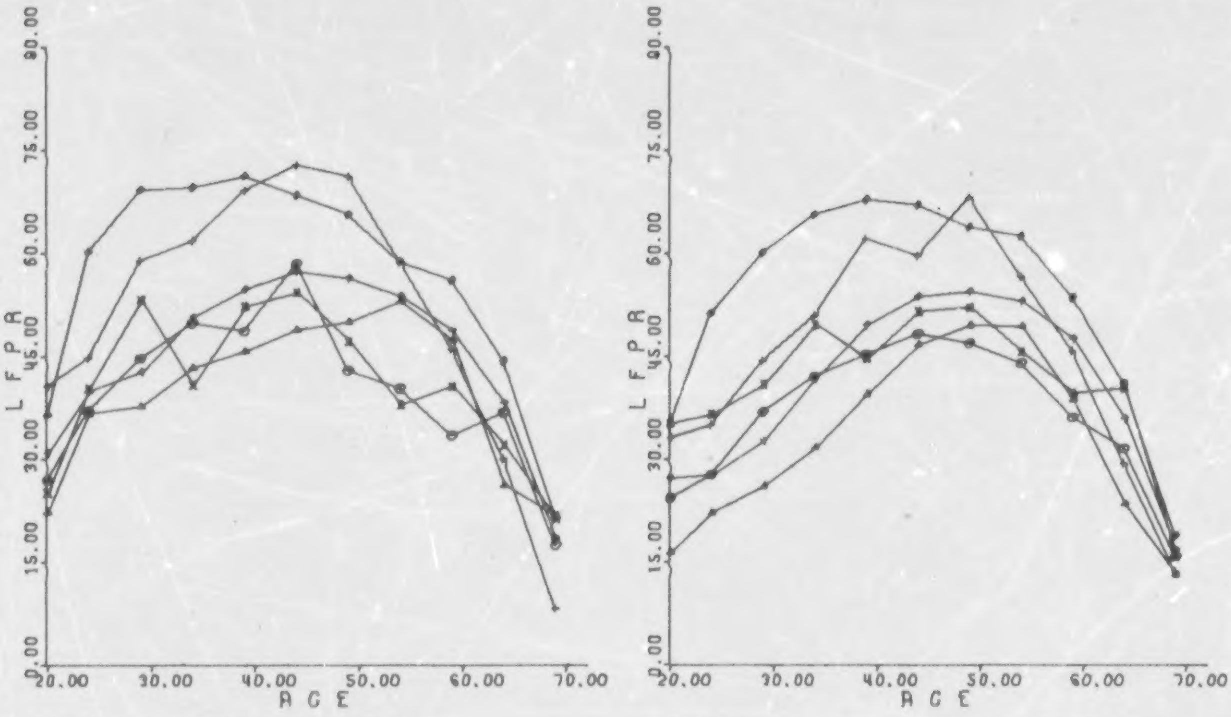
As the real "natives" of this country, questions of citizenship and immigration are largely irrelevant for American Indians. Some Indians have immigrated to the U.S. from Canada and Mexico, but their numbers are not significant. Although movement to and from Puerto Rico and the mainland has considerable relevance for their position in the job market, Puerto Ricans as citizens of the U.S. since the 1920's are not immigrants and are not discussed in the present context.

FIGURE 3.01

LFPR'S FOR MEXICAN, PUERTO RICAN, CUBAN, INDIAN, BLACK, AND WHITE FEMALES, 20-69 BY AGE AND CHILDREN EVER BORN, 1970



FEMALES - NO CHILDREN EVER BORN



FEMALES 1 CHILD EVER BORN

FEMALES 2 CHILDREN EVER BORN

Table 3.31. Age-Specific LFPR's for Females, 20-39, by Number of Related Children Under Six Years of Age, 1970

Age and number of related children	Mexican	Puerto Rican	Cuban	Indian	Black	White
20-24						
None	55.8	51.7	77.0	66.3	73.4	78.2
One	32.6	33.5	42.6	37.5	56.9	36.1
Two	25.5	18.6	18.2	29.5	44.8	24.5
Three or more	15.9	4.9	---	23.5	35.5	20.4
25-29						
None	55.0	43.2	70.0	52.6	70.7	68.7
One	38.5	27.9	44.0	40.8	60.7	34.7
Two	27.0	17.5	31.5	34.7	47.4	22.8
Three or more	17.4	8.0	33.3	21.0	34.2	16.9
30-34						
None	52.2	37.6	65.5	55.5	68.0	56.1
One	33.2	25.3	49.4	35.4	56.7	31.3
Two	22.9	15.7	31.1	25.4	44.2	20.4
Three or more	15.5	4.6	27.3	31.9	31.9	14.7
35-39						
None	46.7	41.5	72.1	48.1	67.7	54.5
One	34.2	23.3	44.3	36.5	56.6	30.2
Two	33.7	15.5	50.0	24.0	43.8	21.5
Three or more	22.9	4.2	---	27.6	36.9	14.9

Year of Immigration

The immigration amendment of 1965 marked a significant change in American immigration policy that has had and should continue to have notable import for the U.S. labor market (North, 1974). However, there is no evidence in Table 3.32 that more recent immigrants (65-70) in any of these three populations have ER's that differ consistently from those of earlier arrivals. Moreover, ER's in general of Mexican and Cuban immigrants to the U.S. since 1950 tend to be lower than whites who immigrated during the same period.

The ER's of Mexican and Cuban men at the same age levels and for the same period of arrival more often favor Cuban men, particularly beginning at age 30. However, exceptions to this pattern are present. The general ordering among immigrant women here is also white, Cuban, and Mexican, given the same qualifying condition as noted for men.

In addition to comparisons among those who immigrated within the same five-year period and those who were about the same age in 1970, Table 3.32 provides for still another kind of comparison. By reading along the diagonal from the upper left toward the lower right cells, persons who were the same age at the time of immigration can be compared. Mexican men who were 20 to 24 years of age in 1970 and who immigrated between 1965 and 1970--shown in the first panel of Table 3.32--were 15 to 19 years old at the time of their move to the United States. The ER for these men was 94.4 in 1970. For the next oldest category of Mexican men who were also 15 to 19 years old at the time of immigration, the ER rises to 98.2. Inspection of rates along the diagonals does not reveal any clear patterns of increasing or decreasing employment, suggesting either that age at the time of immigration has little bearing on subsequent employment or more detailed information is needed to ferret the association.

Citizenship Status

The citizenship status of immigrants has long been influential on their employment possibilities. Comparison of ER's between aliens and naturalized citizens indicates an overall tendency for naturalized citizens to have higher ER's than aliens (Table 3.33). But this not as nearly the case among Mexican men and particularly Mexican women as for Cuban and white men and women.

Differences in ER's favoring Mexican naturalized over alien men are mostly apparent for ages 55 to 69. Otherwise, little employment advantage in being a naturalized Mexican male is in evidence, although the advantage may lie in types of employment and earnings. Employment rate differences

Table 3.32. Age-Specific ER's for Immigrants, 20-54, by Selected Years of Immigration and Sex, 1970

Year of immigration	20-24	25-29	30-34	35-39	40-44	45-49	50-54
			Mexican male				
1965-70	94.4	94.1	95.1	93.8	92.8	97.6	87.0
1960-64	93.3	98.2	93.1	95.7	93.3	93.8	100.0
1955-59	92.4	95.8	95.5	96.4	95.1	94.2	97.3
1950-54	90.5	95.8	91.6	98.6	97.5	94.4	92.5
			Mexican female				
1965-70	92.2	97.1	89.2	95.5	86.8	88.0	89.3
1960-64	90.7	93.4	91.2	94.4	89.8	92.6	88.0
1955-59	92.7	87.2	92.1	88.6	88.6	95.1	96.5
1950-54	90.8	86.7	93.2	92.0	90.0	93.6	100.0
			Cuban male				
1965-70	93.5	95.4	97.7	96.7	96.4	90.9	94.1
1960-64	93.8	96.6	98.2	97.8	99.0	98.3	97.9
1955-59	88.4	100.0	97.8	97.1	98.3	96.6	95.3
1950-54	---	88.9	92.9	95.9	100.0	96.4	100.0
			Cuban female				
1965-70	94.7	88.9	92.3	92.8	89.1	91.5	91.6
1960-64	94.6	95.9	90.4	93.9	92.1	93.2	94.9
1955-59	100.0	100.0	92.0	89.3	91.1	97.2	96.1
1950-54	---	---	---	100.0	93.8	95.3	70.0
			White male				
1965-70	95.5	95.7	97.0	97.6	95.5	96.8	95.5
1960-64	94.3	96.8	98.0	97.7	97.8	96.4	97.5
1955-59	90.8	96.2	98.4	97.5	97.7	97.6	97.2
1950-54	91.7	97.1	97.1	98.0	98.4	97.5	98.1
			White females				
1965-70	93.8	93.6	93.5	94.5	94.5	92.0	94.6
1960-64	96.2	94.5	95.2	94.6	94.4	93.4	92.7
1955-59	93.6	96.8	94.2	94.7	94.8	96.1	94.2
1950-54	94.8	95.2	95.8	96.7	96.5	97.7	95.9

Note: Unemployment rates may be obtained from these data by subtracting individual employment rates from 100.0.

Table 3.33. Age-Specific ER's for Aliens and Naturalized U.S. Citizens, by Sex 1970

Sex and age	Mexican		Cuban		White	
	Alien	Naturalized	Alien	Naturalized	Alien	Naturalized
Male						
14-19	87.6	84.5	91.1	78.5	92.4	91.8
20-24	92.7	94.0	93.2	93.4	94.0	92.9
25-29	95.2	96.3	95.6	98.7	95.7	96.7
30-34	94.2	94.0	97.8	97.6	97.6	97.5
35-39	96.1	96.0	97.0	97.4	97.7	97.7
40-44	95.0	95.2	97.3	98.8	96.6	98.2
45-49	94.7	96.2	94.8	96.5	97.1	97.6
50-54	95.7	95.4	95.4	97.5	95.8	97.6
55-59	93.9	96.7	95.0	98.6	95.4	97.6
60-64	92.1	96.8	92.9	96.0	94.6	96.5
65-69	92.4	93.8	95.2	96.2	90.8	93.9
Female						
14-19	92.3	78.5	97.0	96.0	92.4	92.1
20-24	92.0	91.5	94.9	97.8	93.7	94.9
25-29	94.0	91.8	91.5	98.2	94.3	94.3
30-34	92.0	91.2	89.7	97.5	94.8	94.8
35-39	91.1	89.6	91.7	97.1	95.0	95.7
40-44	92.5	89.1	89.3	93.3	94.7	95.4
45-49	91.7	95.1	92.4	96.9	94.5	96.1
50-54	92.4	89.1	92.3	92.7	95.1	96.1
55-59	90.5	92.9	89.6	92.7	94.7	95.3
60-64	92.4	92.6	90.1	89.4	94.0	95.3
65-69	95.6	88.5	94.5	66.4	92.4	91.5

Note: Unemployment rates may also be obtained from these data by subtracting individual employment rates from 100.0.

between Cuban alien and naturalized men are generally small but favor naturalized for most ages. White men here do not dominate as they have in most other comparisons in this report; ER's of naturalized and alien Cuban men are similar to naturalized whites, while those for naturalized Mexicans lag behind only slightly.

Among women, alien whites have generally superior ER's; when the comparison is among naturalized citizens, Cuban women predominate up to age 49 after which white women assume the most favorable position. Alien Mexican women do about as well as alien Cuban women but tend to be least advantaged among naturalized females. Finally, ER's for women at specified ages and citizenship status tend to be lower than for similar men, although some deviation from this tendency may be viewed in relation to Cubans.

SUMMARY

This chapter has focused primarily on sex and age-specific differentials in labor force participation and unemployment among Mexican, Puerto Rican, Cuban, Indian, black and white men and women in the U.S. These differentials have been examined in light of a number of relevant variables available in the 1970 census PUS; namely, education (or years of completed schooling), vocational training, marital status, family structure and type, fertility, immigration, and citizenship. For the most part, patterns across these variables have been consistent among the six sample populations within though not between sex divisions. Related to this outcome no doubt is the greater labor force participation selectivity that operates among women. Certainly, findings reported here support the notion that the Spanish origin population in the U.S. is not homogeneous.

Results

Under most of the various conditions examined in this chapter, the labor force participation and unemployment of Spanish origin men generally appeared, though not invariably, to be disadvantaged in comparison with that of similar white men. This pattern was, however, of less magnitude in the case of Cuban than Mexican and particularly Puerto Rican men. On the other hand, Cuban and Mexican men, unlike their Puerto Rican counterparts, were more often in a better labor market position than comparable black men, although the pattern here for Mexican compared to Cuban men did not as consistently surpass that for black men. Of all men in this study, Indian men were to a substantial degree in the generally least favorable employment position.

As is well-known, black women participate relatively more in the labor market than white women (Bogue, 1969). However, Cuban women in this study frequently participated at similar levels as black women; under some conditions (e.g., heads of household, or with less than eight years of schooling), Cuban women even participated more (although the reverse was more often the situation). Generally lowest in participation were Puerto Rican women, but under certain circumstances such as having four years of high school, they participated near the level of white women. Generally intermediate between black and Cuban on the one hand and Puerto Rican on the other were white, Mexican, and Indian women. It is evident then that the relative positions of the populations in relation to labor force participation were not the same for both sexes. For example, while Indian men participated least among men in this study under a variety of conditions, Indian women, somewhat in contrast to their overall groups position, frequently participated more than both Puerto Rican and white while similar to Mexican women, and, whereas white men most often participated at the highest levels among men, white women were often found near the bottom in participation among women. However, lowest unemployment was found most often for white women; not surprisingly, Indian women dominated among the unemployed.

Controls for years of completed schooling and age provided some of the most important comparisons in this chapter, and the relative participation of the several populations in relation to education reveals interesting patterns. Among men, the participation of whites generally predominates over that of Spanish, Indian, and black men. However, the higher participation rates of white men are most apparent in comparing those who have graduated from high school only rather than those at the more educational extremes. Of those with one to seven years of schooling, Mexican and Cuban men participate relatively more and black men to a similar degree as white men, while for college graduates, participation rates among the male populations are very similar, except for the lower rates found for Indian men. Moreover, UR's appear to follow much the same pattern. Furthermore, the participation of Spanish men does not always exceed that of black men, especially in the case of Puerto Rican men. Cuban men are usually in the most favorable position of the Spanish male populations. Indian men, however, rank consistently lowest in participation and highest in unemployment of all male populations.

The pattern among women is in some ways more interesting than that among the men here. Consistently lowest in participation at each educational level examined are Puerto Rican women, and, at the high school and college educational levels, their participation levels are most closely approximated by white females. Cuban and black women are consistently highest in participation with Mexican and Indian women intermediate. However, lowest unemployment regardless of educational level is most frequently found for white women. If white women participate relatively less than minority women in this study because of lesser economic pressure, a reasonable and at least partial explanation, such lesser economic need allows them relatively more often to withdraw from the labor market when employment possibilities are less attractive. This would help to explain their generally lower unemployment. However, the lower unemployment found for white men in comparison with minority men in this study under conditions of "equal pressure" to be in the labor force and employed suggests that race and ethnicity are also significant factors in the unemployment picture for both sexes.

The educational payoff in participation, that is, the increase in age-specific participation rates with increasing education, is revealing of population differentials. In comparing the participation of grade (one to seven years of school) with high school level male workers, participation increases are greatest for Indian and Puerto Rican and least for Mexican and Cuban men. Among women, where relative participation increases exceed those for men, Indians and Puerto Ricans also show largest gains as well as Mexican women, while Cuban women evince lowest relative increases. In comparing high school with college, increases among men are similar though Puerto Rican men reveal the greatest and white men the least gains in participation. Here, also, women outgain men, and most minority compared to white women manifest a substantially greater jump in participation levels.

There is reason to believe that economic pressure forces a disproportionate number of minority women into the labor market. But there were also indications that other factors may be operating as well. Not only did college educated minority women in this study participate at relatively higher levels than white women with the same education, but the relative increase in participation in comparing high school with college graduates was greater for minority than white women. In other more general terms, skills related to higher education obtained by minority women are relatively more likely to find their way into the labor market than those obtained by white women. This may represent greater pressure (or alternatively, opportunity) from whatever source on minority women to utilize higher education beyond the receipt of the degree. As their numbers increase, (forgetting for the moment the effects of the women's movement), their pattern may eventually begin to approximate that found for white women. But for the present, college educated minority women appear to reflect a higher labor market return relative to the investment.

While it is difficult to draw conclusions about the extent of discrimination against Spanish Americans based on these data, the different patterns for Spanish and white men in relation to education may suggest that discrimination as reflected by LFP and UR's is somewhat educationally selective. Among males with less than eight years of schooling, participation and unemployment rates for Spanish and black men were comparable to those for same-aged whites, and in some cases higher than for whites. But at the high school graduate level, higher participation and lower unemployment rates obtained for white in relation to Spanish men, with a reconvergence again at the college level.

Compared with white men, Mexican American men tended to stay in the labor force at older ages when they had four years of high school education or less. This pattern may be related to economic need for Mexican Americans in the absence of such things as suitable pension or retirement incomes, a reasonable assumption. Mexican men at older ages probably suffer the greatest degree of language handicap of their group. Moreover, many jobs that they may have held throughout their work years, such as that of migrant farm-worker, were unlikely to have been accompanied by decent retirement plans and social security provisions.

It is no secret that the overall employment situation of Native American men and women in the U.S. is dismal. And underscoring this awareness in this investigation was the substantially lower participation and higher unemployment of Indian compared with other minority as well as white majority men in this study, even when age and education were controlled. Moreover, increased education for Indian men was not paralleled at all ages by a reduction in unemployment when comparing those having four years of high school to those with less than eight years of completed schooling.

It should also be noted in closing that the analysis of labor force participation patterns will in some ways differ from patterns found in the analysis of occupational achievement, mobility, and earnings, simply because the ensuing phases of the study deal with a more select population--employed persons. Hence, what may at times appear to be an inconsistency between patterns noted here and elsewhere may in part be a function of differences in sample populations. For example, one population subgroup that exhibited relatively low participation may also indicate relatively high occupational achievement (e.g., white women). Far from being statistical anomalies, such findings where they occur help to highlight the need to examine the total labor market picture.

CHAPTER 4

DISPARITIES IN OCCUPATIONAL ACHIEVEMENT

The primary purpose of this chapter is to examine differences in occupational achievement and some of the major determinants of occupational achievement. It is common knowledge that white workers attain higher occupational levels than American Indians, Spanish and blacks, but heretofore there has never been a detailed comparison of occupational achievement for all these populations together. Neither is it news that men reach higher occupational levels than women, but the extent to which such differences exist and conditions under which achievement differences are smaller or larger are not well documented.

Differentials in achievement must be seen from at least two major perspectives, as sketched in Chapter 1: inequality and discrimination. As a reminder, it may be emphasized that inequalities in occupational achievement are not the same thing as discrimination. The inequality in level of occupational achievement between men and women, for example, is considered discrimination only for men and women who are equally well qualified. In addition, of course, there may be obstacles that prevent women from achieving the same level of occupational status reached by men. In general terms, men and women with a college education may be considered equally well qualified for occupational achievement, and, in the absence of sex discrimination, this is what should obtain. However, some college-educated women may be handicapped in their achievement efforts by the presence of young children at home which necessitates part-time employment which in turn reduces their achievement potential. With these conditions in mind, attention is directed to differentials in occupational achievement.

LEVELS OF OCCUPATIONAL ACHIEVEMENT

Occupational Distributions of Men

White men are much more heavily concentrated in white-collar occupations than black, Indian and Spanish origin men (Table 4.01). In 1970, 41% of all employed white men in the PUS were in white-collar jobs.* This percentage is more than twice the concentrations for blacks, Mexicans and Indians. Cuban men, with 35% in white-collar occupations, come closest

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*The sampling fractions for the data in this chapter are: white and black, 2%; Mexican, Puerto Rican and Cuban, 3%; and American Indian, 6%.

Table 4.01. Major Occupation Group of Persons, By Sex and Origin, 1970

Occupation and Sex	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Numbers	28179	6529	3814	8390	86868	865293
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Professional	4.3	4.2	11.7	7.7	5.0	14.3
Managerial	3.7	4.1	8.1	4.2	2.7	7.1
Sales	2.9	3.7	4.9	2.0	1.8	7.1
Clerical	5.2	9.9	10.1	5.0	7.2	23.6
Crafts	21.4	16.5	19.1	22.3	15.7	13.3
Operatives	20.5	27.6	20.3	17.5	20.1	5.8
Transp. Equip.	7.0	7.2	5.0	6.2	9.8	5.4
Laborer	14.2	8.4	5.6	16.2	17.0	3.2
Farmer	.7	.1	.3	2.1	1.1	3.2
Farm Laborer	10.5	1.5	.5	6.9	4.2	1.3
Service	9.7	16.7	14.4	9.8	15.0	6.4
Private Household	.1	.1	.1	.1	.5	.0
Female						
Numbers	21169	4522	3444	7220	90488	734711
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Professional	4.6	5.7	8.0	8.6	9.1	14.7
Managerial	1.5	1.2	1.2	1.8	1.2	3.6
Sales	5.6	3.7	5.1	4.2	2.5	8.5
Clerical	22.0	25.6	24.0	22.5	17.9	36.9
Crafts	2.3	2.9	2.2	1.8	1.4	1.8
Operatives	29.8	44.9	45.9	21.3	17.7	14.8
Transp. Equip.	.2	.2	.3	.4	.3	.4
Laborer	1.8	1.4	.7	2.0	1.7	.9
Farmer	.1	.0	.0	.4	.2	.2
Farm Laborer	7.6	.7	.4	3.4	2.7	.6
Service	19.7	12.5	10.9	27.2	26.1	15.7
Private Household	4.8	1.0	1.2	6.3	19.1	1.8

to matching the white male occupational distribution. Within white-collar occupations--professional, managerial, sales and clerical--white men further manifest a pronounced predominance by relatively heavy concentrations in professional and managerial occupations. Mexicans and blacks had the fewest numbers in white-collar jobs--about 16 percent--and these were largely in clerical occupations.

Almost half of all white men in 1970 were employed in blue-collar occupations--crafts, operatives, transportation equipment operatives and laborers. Similar to their concentration in the higher white-collar occupations, white men in manual jobs also predominate at the "upper levels" with a noticeable concentration in the skilled craft occupations. Operative and laboring occupations are clearly the province of minority men. With the exception of Cuban men, a third of all employed minority men are found in these two categories.

Employment in farming has declined over the past several decades, and relatively few find their work in this area. Less than 5 percent of all white men are in farming, and these are mostly in the more renumerative category of farmer rather than as farm laborers. Minority men in farming are much more likely than whites to be farm laborers. Puerto Rican and Cuban men are conspicuous by their relative absence from farming, but Mexican and Indian men are proportionately plentiful.

Minority men are much more heavily concentrated in service occupations--excluding private household workers--than whites. Puerto Rican, Cuban and black men have about 15% of their numbers in service jobs, whereas Mexican and Indian men show about 10%.

Occupational Distributions of Women

White women too are much more heavily concentrated in white-collar jobs than minority women (Table 4.01). Nearly two-thirds of all employed white women in 1970 were in white-collar jobs, and a third were employed in clerical occupations. White women were not only more heavily concentrated in professional occupations than minority women, but they also predominated in clerical occupations. All women, and even black women who had the lowest degree of concentration in white-collar jobs of all minority women, were more likely than most men to be employed in clerical jobs.

In contrast with men in blue-collar jobs, women are primarily operatives. However, only 15% of white women workers were operatives in 1970, while nearly half of all Puerto Rican and Cuban women worked at this semiskilled level. Although farming is a relatively insignificant source of employment for most women, nearly 8 percent of all Mexican women worked as farm laborers.

In service occupations, especially as private household service workers, women are far more in evidence than men. Nearly half (45%) of all black women were employed in service occupations, and a substantial number (19%) were in private household service worker jobs in 1970. Other minority women were less likely than blacks to be employed as private household workers, but only Puerto Rican and Cuban women were less likely than whites to work in service jobs.

In the following analysis comparisons are primarily of two kinds because of the central concern with discrimination. First, the occupational achievements of white workers are taken as a benchmark for purposes of evaluating the achievements of Indian, black, Mexican, Puerto Rican and Cuban workers. These comparisons are typically carried out separately for men and women. Second, the achievement levels of men are compared with those for women within each of the color-ethnic groups. The rationale for this kind of emphasis is that white workers generally show higher levels of achievement than the several color-ethnic groups in this report, which are sometimes referred to collectively as "minorities." Also, since men almost always average higher levels of achievement than women, the levels attained by women are compared with men's achievement within each color-ethnic group. These kinds of comparisons obviously do not exhaust the possibilities. There is sufficient detail in most tables to permit a number of additional comparisons, such as whether Mexican high school graduates average higher levels of achievement than Puerto Ricans, or whether Indians employed "full time" rank higher or lower than Cubans or blacks. The detailed tables partly represent an invitation to readers to make whatever comparisons they wish.

DIFFERENTIALS IN OCCUPATIONAL ACHIEVEMENT

The Occupation Scale

Differences in distributions of workers among major occupation groups are important in their own right, but in order to distinguish differentials in levels of occupational achievement it is first necessary to construct a measure. Occupation groups by themselves are not ordered, although they have often been ranked by such criteria as median earnings and median years of school completed. Furthermore, major occupation groups represent a substantial loss of detail by virtue of combining a large number of specific and not necessarily homogeneous occupations into a few major categories.

In an effort to produce a ranking of workers by the type of occupation in which they were employed, an index of occupational achievement was constructed for this study. The resulting occupation scores were calculated by taking the proportions of workers above the median levels of education and earnings in each of 203 occupations. A regression equation was then employed to provide an estimated score for each occupation. Occupation scale values can range from a high of .99 to a low of zero. Each employed person was assigned a score in accordance with his or her occupation as of 1970. From this assignment of scores, averages were computed. (For a more detailed discussion of the rationale and procedures used, see Appendix A.)

Color-Sex Differences

Differences in levels of occupational achievement are readily apparent. The mean 1970 occupation scores for each of the subgroups in this report are as follows:

	Male	Female
White	.461	.314
Black	.321	.219
Indian	.361	.242
Mexican	.330	.213
Puerto Rican	.318	.237
Cuban	.384	.232

White men predictably show the highest level of occupational attainment among men and white women the highest among women. Ranking in order behind white men are Cubans, Indians and Mexicans with black and Puerto Rican men virtually tied for the lowest ranking. Ranking below white women are Indian, Puerto Rican and Cuban women with black and Mexican women at the bottom. Important and obvious is the fact that white women on the average do not surpass the level of occupational achievement for any of the male populations, even Puerto Rican men.

These average scores provide useful information as far as the ranking of the several groups is concerned, but they also present some benchmarks against which progress toward occupational achievement can be judged. In the most general sense, the occupational levels attained by white men and women serve as a standard against which achievement of minorities can be compared--partly because of the relatively high achievements of white men and women and partly because of the generally dominant position accorded white workers.

Stated as proportions of white achievement levels, the mean occupation scores show:

	Male	Female
White	1.00	1.00
Black	.70	.70
Indian	.78	.77
Mexican	.72	.68
Puerto Rican	.69	.75
Cuban	.83	.74

This translation of mean occupation scores does not alter the picture, but is useful in making comparisons between whites and minorities. For male-female comparisons within each of the populations, a similar transformation of mean occupation scores shows:

	Male	Female
White	1.00	.68
Black	1.00	.68
Indian	1.00	.67
Mexican	1.00	.64
Puerto Rican	1.00	.74
Cuban	1.00	.60

Most women are thus relatively worse off in comparison with their male counterparts than each of the minorities in comparison with white workers.

Achievement Within Occupation Groups

Average levels of occupational achievement for minorities suffer in comparison with whites primarily because minorities are disportionately represented in lower-ranking occupations. Gaps in achievement within major occupation groups are relatively minor (Table 4.02). Spanish, Indians and blacks in professional occupations, for example, average about as a high as whites. Where minorities score lower than whites within an occupation group, the minority workers are more heavily concentrated than whites in the lower-ranking jobs within the major occupation group. Among men in professional occupations, for example, only Cuban men match the average level of achievement reached by white men. However, the chief discrepancies in levels of achievement must be attributed to differences in occupational distributions. Minority men, as already noted

Table 4.02. Mean Occupation Scores by Sex and Major Occupation Group, 1970

Sex and occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.363	.321	.461
Professional	.725	.713	.783	.726	.732	.783
Managerial	.598	.590	.598	.612	.610	.615
Sales	.419	.334	.418	.433	.393	.496
Clerical	.356	.344	.341	.350	.359	.376
Crafts	.417	.424	.411	.421	.410	.437
Operatives	.275	.249	.262	.286	.255	.281
Transp. equip.	.367	.345	.358	.350	.354	.365
Laborer	.272	.268	.274	.264	.269	.274
Service*	.180	.154	.137	.211	.182	.265
Female	.213	.237	.232	.245	.219	.314
Professional	.655	.661	.700	.653	.675	.673
Managerial	.570	.620	.601	.611	.601	.603
Sales	.212	.219	.236	.240	.251	.244
Clerical	.259	.265	.273	.263	.269	.278
Crafts	.400	.439	.417	.420	.403	.417
Operatives**	.159	.162	.130	.170	.171	.182
Laborer	.268	.259	.251	.258	.263	.265
Service	.120	.313	.130	.127	.133	.119
Private household	.006	.004	.005	.004	.005	.005

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* Excluding private household service workers.

** Excluding transportation equipment operatives.

(Table 4.01), are far less concentrated in white-collar occupations than white men, and those in the white-collar jobs tend to hold positions slightly lower than those of white men. In contrast, minority men are well represented in craft occupations and their achievement levels compare favorably with whites.

Minority women also tend to be concentrated more than white women in lower-ranking occupations. Fewer minority than white women are in white-collar occupations, whereas more minority women are in operatives and laborer occupations with the net result that minority women do not average quite as high a level as white women. Black, Indian and Mexican women are heavily represented in service occupations, including private household service, which are among the lowest-ranking jobs for women.

The sex gap in occupational achievement narrows appreciably within major occupation groups, especially within professional, managerial, crafts and laborer occupations. However, women are not found in large numbers in most of the occupations where the sex gap in levels of achievement is the smallest. Women are employed, of course, primarily in three areas: clerical, operatives and service occupations. The average occupation scores for men and women in these three occupation groups indicate rather clearly that women are more heavily clustered within lower-level jobs within each of these categories.

Occupational Achievement and Age

Women reach their peak levels of occupational achievement between the ages of about 20 to 39, whereas men first reach their peak achievement at about age 25 and maintain relatively high levels until about age 50. The highest mean occupation scores for white, black, Indian, and Mexican men are found at ages 35 to 39 (Table 4.03), but women appear to peak about ten years younger.

Relative to the occupational achievement of white men at comparable age levels, minority men do comparatively better at the youngest ages, but

Table 4.03. Mean Occupation Scores For Employed Persons, By Sex, Age and Origin, 1970

Sex and Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
Under 20	.249	.273	.274	.254	.259	.301
20-24	.308	.319	.411	.329	.310	.409
25-29	.346	.323	.421	.379	.342	.479
30-34	.352	.325	.392	.370	.344	.493
35-39	.352	.317	.384	.379	.345	.496
40-44	.343	.334	.379	.366	.334	.487
45-49	.336	.318	.381	.374	.324	.478
50-54	.325	.315	.374	.369	.312	.458
55-59	.311	.275	.356	.363	.297	.441
60-64	.294	.337	.377	.350	.292	.433
65-69	.268	.318	.405	.339	.273	.420
Female	.213	.237	.232	.242	.219	.314
Under 20	.195	.225	.220	.193	.207	.230
20-24	.230	.254	.273	.239	.249	.327
25-29	.230	.241	.267	.255	.263	.356
30-34	.229	.257	.233	.245	.245	.328
35-39	.217	.234	.246	.251	.242	.316
40-44	.204	.224	.249	.246	.220	.313
45-49	.198	.237	.207	.238	.201	.309
50-54	.194	.206	.193	.257	.183	.305
55-59	.175	.208	.190	.225	.162	.303
60-64	.185	.209	.179	.242	.153	.309
65-69	.181	.222	.161	.236	.126	.297

not enough to alter the general pattern of achievement among the minorities and whites. Much the same is true for women, although Indian women compare more favorably with white women at ages 35 and over.

PREPARATION FOR OCCUPATIONAL ACHIEVEMENT: EDUCATION, TRAINING AND HEALTH

Education, vocational training and health are all factors that either impel or impede higher levels of occupational achievement. Workers who are equally well educated and trained and who are in good health should accomplish about the same levels of occupational achievement. A rigorous test of this proposition is not possible with the present data, but differences in levels of achievement should diminish when these preparation-and-readiness factors are controlled.

Education

Occupational achievement is dependent on education in at least two ways. First, formal schooling is normally completed prior to the attainment of an occupational standing even among many of the youngest workers. (In designating the study population, one of the reasons for excluding persons still enrolled in school was to eliminate the influences of simultaneously working and going to school.) Second, occupancy of many jobs is initially and primarily dependent on reaching certain levels of educational attainment. The requirements for certain occupations, such as physician or dentist, can not be met unless and until one has successfully completed the appropriate schooling. Educational prerequisites for other occupations, such as typist or retail sales clerk, are less rigid, but nevertheless usually indicate the need for attaining at least some high school. Still other occupations have very little by way of educational requirements. A consequence of such variations in educational attainment as a prerequisite for incumbents of an occupation is a strong and clear relationship between levels of educational attainment and occupational achievement.

The nondiscrimination thesis says, however, that at given levels of education workers should reach about the same occupational levels. In other words, if color-ethnic background or sex characteristics are not determinants of occupational achievement, there should be little if any difference in levels of occupational achievement when education is controlled. Differences in levels of occupational achievement among the several groups in this study are partly a function of differences in educational attainment.

Mexican and Puerto Rican workers, for example, show lower average levels of occupational achievement than whites, partly because of their generally lower levels of educational attainment. The influence of such differences between populations is controlled when comparisons are made between workers with similar levels of education.

In general, Spanish origin workers average about 70 to 75% of the occupational levels attained by white workers (Table 4.04). The same is true for Indian and black workers. At specified levels of educational attainment, however, there are two distinct kinds of patterns. At lower educational levels, the occupational achievements of minorities tend to be lower than for comparable white workers, but at higher educational levels differences in achievement tend to narrow considerably.

For those who have completed eight years of elementary education, Spanish origin men and women do not equal the occupational levels of white workers. At this educational level, white men average .352 on the occupation scale, compared with .312 for Mexican men, .291 for Puerto Rican men, and .309 for Cuban men. For women at this educational level, the pattern is similar. White women average .193 in contrast with .169 for Mexican, .180 for Puerto Rican and .157 for Cuban women.

American Indian and black workers also do not attain as high an occupational level as whites among all those with eight years of schooling. Indians with an average score of .310 and black men with an average of .283 are noticeably below the occupational level for comparable white men. The pattern is repeated for women, where white women averaged .193, Indian women .170 and black women .123.

Much the same pattern occurs for those who completed high school. Levels of occupational achievement are invariably higher for those with high school than for those with lesser education, but Mexican men who are high school graduates average only .370 on the occupation scale, compared with .430 for white men. Mexican women who are high school graduates average only .249, which was below the average of .282 for white women. As shown in Table 4.04, Puerto Ricans, Cubans, Indians and blacks at the high school level average lower levels of achievement than comparable white workers.

Among college graduates in 1970, the occupational achievement gap narrows substantially. Among men, Mexicans, Puerto Ricans, Indians and blacks reach at least 90% of the occupational level of whites. The achievement of Cuban college educated men is about 80% the level of white college men. Mexican men who are college graduates reach an average score of .645 or 98% as high as the average for white college men. Indian college graduates also reach 98% of the white level among male college graduates. Puerto Rican and black men at this educational level do almost as well with average achievement scores of .591 and .610, respectively.

Table 4.04. Mean Occupation Scores for Employed Persons, By Sex and Education, 1970

Sex and Years of School Completed	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
None	.237	.242	.299	.265	.246	.302
Elem., 1-7	.273	.266	.288	.288	.269	.329
Elem., 8	.312	.291	.309	.310	.283	.352
H.S., 9-11	.333	.304	.325	.330	.297	.384
H.S., 12	.370	.361	.371	.371	.332	.430
College, 1-3	.445	.470	.422	.457	.409	.519
College, 4	.645	.591	.530	.643	.610	.658
College, 5 or more	.740	.733	.700	.744	.745	.785
Female	.213	.237	.232	.242	.219	.314
None	.134	.182	.150	.162	.112	.197
Elem., 1-7	.146	.179	.141	.145	.098	.175
Elem., 8	.169	.180	.157	.170	.123	.193
H.S., 9-11	.203	.209	.198	.193	.161	.255
H.S., 12	.249	.255	.239	.245	.227	.282
College, 1-3	.310	.356	.306	.340	.328	.370
College, 4	.611	.597	.385	.609	.650	.623
College, 5 or more	.658	.704	.495	.679	.715	.716

Among women, levels of occupational achievement also tend to converge at higher educational levels. Indian women with eight years of schooling show a mean occupation score of .170, or less than 90% the level of comparable white women. For those with four years of college, Indian women average .609, very close to the occupational level of white women college graduates, .623. Mexican and Puerto Rican women with this much education also rank relatively high on the occupation scale, with average scores of .611 and .597, respectively. Cuban college women, however, compare much less favorably with an average score of only .385.

Most remarkable among women are the absolute and relative gains for black women in occupational achievement with higher levels of educational attainment. Black women, with an average score of only .123 for those with eight years of school completed, rank lower than all others. From that achievement level, about two-thirds as high as that for comparable white women, black women who are high school graduates narrow the gap between themselves and white women by reaching an average score of .227. As college graduates, however, black women not only match the occupational level of white women, but surpass that level. Black women college graduates attain a level of .650, compared with an average of .623 for white women.

Most women continue to rank below men, despite the narrowing sex gap in occupational achievement. At the high school graduate level, for example, Mexican women, with an average score of .249, are well below the level of Mexican men (.370). For Puerto Ricans, the average is .255 for women and .361 for men among high school graduates. All other women in the sample populations also fail to reach the same occupational levels of men in their groups. In order for women to surpass the levels of occupational achievement of men who have had lesser amounts of education, women must generally have attended college.

The relatively narrow gap in occupational achievement for college graduates is consistent with nondiscrimination between color and ethnic groups. This is less so for the achievement gap between the sexes. At lower levels of education attainment, however, there is substantial indication in this data of possible discrimination against color-ethnic minorities and against women. For those populations with relatively low levels of educational attainment, such as Mexicans and Puerto Ricans, the impact of discrimination is relatively strong since so many are found at lower educational levels.

Vocational Training

All workers without vocational training show lower levels of occupational achievement in 1970 than workers who report they had training (Table 4.05).

Table 4.05. Mean Occupation Scores for Employed Persons, By Sex and Vocational Training, 1970

Sex and Training	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
No training	.314	.304	.364	.349	.313	.457
Training						
Business and office	.434	.430	.422	.461	.415	.530
Nursing, health	.441	.389	.639	.530	.388	.589
Trades and craft	.385	.381	.366	.380	.357	.446
Engineering Tech., draftsman	.509	.489	.577	.510	.468	.601
Agr. or home ec.	.315	.371	.347	.385	.318	.390
Other field	.407	.387	.463	.454	.402	.515
Not reported	.337	.299	.380	.298	.291	.383
Female	.213	.237	.232	.242	.219	.314
No training	.203	.224	.213	.234	.206	.310
Training						
Business and office	.281	.290	.299	.300	.296	.324
Nursing, health	.274	.290	.354	.281	.262	.383
Trades and craft	.191	.218	.146	.209	.213	.224
Engineering tech., draftsman	.290	.404	.507	.297	.368	.493
Agr. or home ec.	.232	.164	.295	.159	.303	.336
Other field	.266	.355	.284	.384	.383	.472
Not reported	.235	.250	.236	.232	.218	.295

Although the increment in level of achievement is not great, these results indicate that workers with training meet an objective of job training by their accomplishments in the job market. From the census data, it is not possible to ascertain when a worker received training nor the particular job training program. The census files nevertheless indicate the general field in which a trainee received his training (see Ch. 3). Prior to 1970, census data included no information on vocational training.

Within some of the specified areas of training, the benefits or gains in occupational achievement are relatively high. Men and women with training as engineering technicians and draftsmen attain higher occupational levels than other former trainees. However, relatively few women have such training. Minority men more so than minority women improve their relative standing with whites if they receive training as engineering technicians and draftsmen. Minority men also improve their standing relative to whites if they have training in business and office work, but minority women do not experience this kind of gain. For those with training in nursing and health--an important area for women--minority women fail to show an appreciable improvement in relation to white women. For those trained in the trades and crafts areas, minorities gain in their levels of occupational achievement relative to whites.

In general, minority men and women in this report improve their occupational standing as a result of job training to a greater extent than whites. Since the educational levels of minorities, especially at the older ages, tend to lag behind the educational attainments of whites, job training has the effect of reducing differences in occupational achievement. However, improved occupational achievement for those with job training is not great enough for minorities to catch up with whites. In few instances do minorities with training attain higher levels than the overall white average.

Craft Apprentices

The traditional custom of serving an apprenticeship to meet requirements for craft occupations is still practiced today. However, relatively few apprentices were in the labor market in 1970. Out of all white men, for example, only 0.2% were serving as apprentices. However, the predominance of white males among apprentices remains strong. In 1970, nearly nine out of every ten apprentices were white male: 92% of male apprentices were white, and 97% were male. About 5% of male apprentices were black, 2% Mexican, while Indians, Puerto Ricans and Cubans combine for about 1% of the total.

Disability

Physical and mental disabilities can serve as constraints on workers' achievement, or conversely, the absence of a disability provides a kind of advantage for a healthy worker. It is not surprising therefore to find that workers without a disability show higher levels of occupational achievement than those reporting a disability (Table 4.06). Census data contain information on a person's perceived disability, rather than a medical report. Consequently, what was reported as a disability may differ from other definitions of disability. In any case, a worker's perception of himself may affect his performance in the job market.

Minority workers not reporting a disability fail to close the achievement gap with whites, but this is partly because a majority of all workers are not disabled and their achievement levels are strongly reflected in general group averages. Nevertheless, it is important to note that healthy minority workers did not lose ground in comparison with whites.

Among workers reporting a "work-preventing disability," achievement scores were typically lower than group averages. With a presumably severe disability, Mexican men average only .285 on the achievement scale in comparison with an average of .331 for Mexican men without a disability. Puerto Rican, Cuban, Indian, black and white men show a similar pattern of higher achievement for those without a disability. A similar pattern is found among women, where Mexican women average .215 without a disability and .208 if they had a work-preventing disability. Partly a consequence of relatively low frequencies, Puerto Rican, Cuban and Indian women reporting work-preventing disabilities actually average higher achievement than those without disabilities. However, the expected pattern holds true for white and black women.

Contrary to the expected decline in levels of achievement with increased duration of a disability, there is no clear pattern. There is no apparent explanation for this, but it may be that workers with a disability somehow learn to adjust in such a way that their level of achievement is not greatly affected over a period of time.

SOURCES OF EMPLOYMENT

Industry

The nature of work requirements in different types of industries varies sufficiently to have an effect on average levels of occupational achievement

Table 4.06. Mean Occupation Scores For Employed Persons, By Sex and Disability, 1970

Sex and Disability	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
No disability	.331	.318	.388	.366	.323	.465
Work-limiting disability						
Less than 6 mos.	.284	.290	.354	.312	.298	.421
6-11 mos.	.295	.329	.320	.354	.302	.411
1-2 years	.317	.317	.339	.322	.295	.415
3-4 years	.313	.345	.327	.331	.293	.419
5-9 years	.323	.377	.346	.346	.307	.422
10 years or more	.329	.306	.334	.354	.298	.424
Work preventing disability	.285	.276	.307	.307	.289	.384
Female	.213	.237	.232	.242	.219	.314
No disability	.215	.238	.235	.245	.224	.317
Work-limiting disability						
Less than 6 mos.	.204	.222	.181	.200	.181	.266
6-11 mos.	.174	.304	.207	.215	.186	.265
1-2 years	.167	.184	.215	.256	.156	.270
3-4 years	.199	.204	.199	.237	.175	.274
5-9 years	.208	.241	.134	.260	.152	.277
10 years or more	.181	.217	.188	.251	.166	.277
Work preventing disability	.208	.277	.245	.298	.181	.260

within an industry. Some industries are heavily staffed by white collar-workers, and others are predominantly blue-collar. Some industries require different kinds of skills than others. As a result of these and other differences between types of industries, it is expected that average levels of achievement will vary by industry. With the exception of farming occupations, which are classed entirely in agricultural industry, all occupations appear to some degree in every industry. One characteristic of the census classifications of occupations and industries is that occupational classes overlap industrial classes considerably. Professional occupations, for example, are heavily concentrated in professional service industries by virtue of the classification systems.

Employment in professional service industries therefore results in relatively high levels of occupational achievement (Table 4.07). The highest occupation scores for white men (.671) and white women (.442) are for those employed in professional service industries. White workers in public administration, finance, insurance and real estate, and business and repair service industries also attain high levels of occupational achievement. Lowest levels of achievement occur in personal services, manufacturing, wholesale and retail trade, and entertainment and recreation industries. White men in the construction industry also rank relatively low.

Black workers in personal service industries record the lowest levels of achievement for blacks. Black men average a score of only .348, but black women are even lower with a .138. Many blacks of course are employed in service occupations and this alone helps explain the relatively low overall level of achievement for black workers. Furthermore, blacks in service industries fare worse than whites. The mean occupation score for black women in service industries is only a third as high as that for white women in that category. Black men do better in comparison with white men, but still average well below the level of whites in service industries.

On the average, Indian men and women attain about three-fourths the level of white workers' achievement. Their achievements do not drop appreciably below the general averages in any of the industrial groups, except in the personal service industries. As with black workers, Indians do not match the white levels of achievement in any industry, although they come closest in public administration, construction, and entertainment and recreation for Indian men, and in these plus transportation for Indian women.

Industries in which occupational achievement of Mexicans, Puerto Ricans and Cubans is highest include public administration, professional services, business and repair services, construction, and transportation, communication and utilities industries. In public administration, all

Table 4.07. Mean Occupation Scores For Employed Persons, By Sex and Industry Group, 1970

Sex and Industry	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
Agr., forestry, fisheries	.143	.183	.234	.189	.159	.262
Mining	.372	.358	.478	.378	.350	.444
Construction	.359	.378	.398	.377	.338	.423
Manufacturing	.342	.312	.362	.351	.311	.441
Transp., communctn., utility	.364	.339	.395	.354	.327	.446
Wholesale and retail trade	.325	.287	.342	.344	.309	.432
Finance, ins., and real estate	.463	.352	.453	.452	.368	.585
Business and repair services	.365	.376	.380	.366	.341	.462
Personal services	.232	.199	.204	.257	.208	.348
Entertainment and recreation	.306	.285	.278	.371	.319	.431
Professional services	.437	.380	.646	.486	.411	.671
Public administr.	.437	.425	.489	.447	.409	.529
Female	.213	.237	.232	.242	.219	.314
Agr., forestry, fisheries	.113	.115	.087	.179	.132	.217
Mining	.343	.363	.293	.268	.320	.353
Construction	.341	.307	.352	.322	.297	.334
Manufacturing	.209	.194	.166	.226	.219	.263
Transp. communctn., utility	.287	.299	.335	.301	.266	.312
Wholesale and retail trade	.183	.210	.212	.183	.190	.227
Finance, ins., and real estate	.301	.296	.306	.317	.296	.347
Business and repair services	.276	.311	.271	.325	.268	.350
Personal services	.088	.130	.130	.088	.046	.138
Entertainment and recreation	.276	.346	.325	.310	.247	.306
Professional services	.296	.322	.444	.315	.340	.442
Public administr.	.329	.407	.429	.336	.351	.374

of the Spanish origin men and women compare more favorably with whites than the Spanish general average. Puerto Rican and Cuban women in public administration achieve an even higher occupational level than white women. In professional services, the Spanish suffer in comparison with whites, except for Cuban men and women who do relatively well in this area. Cubans also improve their standing relative to whites in the construction and transportation industries. Spanish workers compare least favorably with white workers in several industries. For example, Mexican men and women compare rather poorly with whites in personal service industries. Puerto Rican men in professional services, personal services, and finance, insurance and real estate, and Puerto Rican women in professional services and manufacturing do less well than whites. For Cuban women, employment in manufacturing industries fails to elevate their status.

Class of Worker

Private businesses are the most common source of employment for all workers, but occupational achievement is consistently lower in private firms than for government workers (Table 4.08). The preponderance of professional and administrative jobs in government partly accounts for this relationship, but all minorities and both sexes achieve higher status in government employment regardless of the reasons.

Among the three Spanish groups, Mexican workers fare relatively well in Federal and State employment, but not especially well if employed by local governments. Puerto Rican workers, as with most workers, do relatively well in Federal employment, but Puerto Ricans reach their highest levels of achievement in local government. Cuban men in State government (.703) and women in local government (.508) far surpass their general average levels of achievement.

For American Indians there is little variation in levels of achievement by the three major governmental units, although Indian women score noticeably higher in local government.

White men achieve their highest levels in State governments, whereas for white women employment in local government units provides the highest achievements. Local government employment is the source of highest achievement for black men and women, followed in order by State and Federal government employment. Blacks, especially women, move up substantially if they are employed in government.

In sum, the general patterns of relationships between levels of occupational achievement for minorities and whites is not altered much by controlling for class of worker. Since private firms are the largest category of employer, it is important to note that minorities compare less

Table 4.08. Mean Occupation Scores For Employed Persons, Sex and Class of Worker, 1970

Sex and Class of Worker	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
Private business	.313	.309	.362	.341	.302	.444
Federal govt.	.429	.405	.459	.425	.379	.524
State govt.	.415	.344	.703	.410	.388	.567
Local govt.	.389	.330	.480	.424	.391	.547
Self-employed	.403	.406	.496	.378	.382	.474
Working without pay	.260	.488	.000	.179	.163	.246
Female	.213	.237	.232	.242	.219	.314
Private business	.192	.219	.214	.199	.166	.274
Federal govt.	.317	.344	.431	.323	.337	.378
State govt.	.341	.274	.486	.329	.347	.429
Local govt.	.345	.364	.508	.368	.424	.517
Self-employed	.274	.250	.246	.344	.249	.345
Working without pay	.178	.219	.305	.159	.207	.258

favorably with whites in private businesses than in general. Minority workers in federal government, on the other hand, rank higher in relation to white workers than in other sources of employment.

As a final note on this topic, women do not generally attain occupational levels as high as men, but among the several class-of-worker categories some women average higher than their masculine counterparts. White women employed by local governments, for example, outscore white men employed in private business. Black women in local government also outscore black men in private enterprise and also black men in any of the three levels of government. Indian, Mexican, Puerto Rican and Cuban women in local government also reach higher levels of occupational attainment than men in these groups.

FULL-TIME AND PART-TIME EMPLOYMENT

Weeks Worked

Occupation scores as measures of occupational achievement are dependent on the amount of time worked during the year. Earnings are a component of the index and earnings are dependent in part on how much time has been spent in gainful employment. A majority of all employed persons work "full-time", i.e., at least 50 weeks a year and 40 hours or more per week. Yet, the proportions of full-time workers vary among the several color-ethnic groups and between men and women. For this reason occupational achievement can be expected to vary between groups. By controlling for the amount of time worked, such differences should be reduced.

An interesting result is found when the number of weeks worked in 1969 is controlled. Mean occupation scores increase steadily and consistently with increases in weeks worked for all men, but for women there are two peaks (Table 4.09). White women reach a high average occupational level for those who worked 40 to 47 weeks (.353), but the level drops to .309 for those working 48 and 49 weeks and rises slightly to .313 for those working the full year of 50 to 52 weeks. A similar pattern occurs for black women, except that a single peak is reached for those working 27 to 39 weeks, only to flatten out to the level of .218 for those working 48 weeks or more. Mexican, Puerto Rican, Cuban and Indian women all show the dual-peak pattern. The high levels of achievement at about 40 weeks of work can be attributed to the relative concentration of women in jobs that are typically less than 52 weeks, primarily as public school teachers. The second peak is attributed to the numbers of women employed in such jobs as secretaries, typists and nurses, where

Table 4.09. Mean Occupation Scores for Employed Persons, By Sex and Weeks Worked in 1969

Sex and Weeks Worked	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
13 weeks or less	.249	.287	.322	.295	.275	.359
14-26 weeks	.268	.301	.347	.316	.287	.391
27-39 weeks	.282	.278	.351	.320	.306	.412
40-47 weeks	.305	.301	.332	.344	.315	.432
48-49 weeks	.313	.310	.345	.342	.321	.448
50-52 weeks	.349	.329	.404	.384	.329	.473
Did not work in 1969	.253	.285	.303	.283	.292	.420
Female	.213	.237	.232	.242	.219	.314
13 weeks or less	.181	.226	.202	.203	.169	.272
14-26 weeks	.188	.228	.216	.220	.197	.295
27-39 weeks	.214	.248	.228	.239	.256	.349
40-47 weeks	.217	.230	.234	.254	.249	.353
48-49 weeks	.203	.228	.212	.235	.218	.309
50-52 weeks	.232	.245	.248	.266	.218	.313
Did not work in 1969	.177	.214	.179	.168	.187	.267

employment tends to be on a full-year basis. The failure of black women to show the second peak may be a result of the relatively few employed in such white-collar full-year occupations.

The achievement gap between minorities and whites narrows for those employed 50 to 52 weeks. Hence, although minority men and women still do not reach as high a level of occupational attainment as white men and women, they are slightly closer if they work a full year. However, for the total employed, Mexican men average .330, or 72 percent as high as all white men. Such advancement is slight but nevertheless contributes to the improved standing of Mexican and other minorities.

"Newcomers" appear to enter the job market at relatively high levels. Those who did not work in 1969 but who were employed in the Spring of 1970 are termed "newcomers" even though in many cases they may be returning to the job market. White men who are "newcomers", for example, show a relatively high level of achievement (.420), about 90% as high as the level for all white men, and higher than the averages for those working less than 40 weeks in 1969. White women and black, Mexican, and Puerto Rican "newcomers" also show relatively high achievement, but Indian and Cuban men and women do not.

Hours Worked

Levels of occupational achievement vary with the number of hours worked per week, but there does not seem to be a single optimum number of hours in order to reach high occupational standing (Table 4.10). For both sexes, there are two amounts of time which result in relatively high levels of achievement. The occupational achievement for white men rises with increased hours to a peak of .505 for those working 35 to 39 hours a week, then declines slightly only to hit another peak at 45 to 49 hours. In contrast, the average levels of achievement for Mexican men rise to a single peak at 41 to 48 hours and then declines. The absence of a second peak for Mexican men may be attributed to the numbers of Mexican men in farm occupations where hours are long and achievement levels relatively low. Indian men, also relatively predominant in farming, reach a single peak of achievement at 45 to 49 hours. However, for Puerto Rican, Cuban and black men the dual-peak pattern persists. Women show a pattern of achievement and work hours similar to that for men. Mexican and Indian women, however, indicate a dual- in contrast to the single-peak pattern obtaining for black women.

The tendency for occupational achievement to be relatively low for many of those working approximately 40 hours a week calls for an explanation. There is no direct evidence from this data alone, but one speculation might be that many lower level white-and blue-collar salary and wage jobs

Table 4.10. Mean Occupation Scores For Employed Persons, By Sex and Hours Worked

Sex and Hours Worked	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
1-14 hours	.251	.336	.371	.304	.286	.395
15-29 hours	.276	.330	.343	.317	.282	.403
30-34 hours	.297	.307	.352	.307	.298	.421
35-39 hours	.310	.328	.382	.359	.355	.505
40 hours	.339	.305	.366	.365	.319	.450
41-48 hours	.340	.341	.401	.374	.334	.482
45-59 hours	.337	.368	.408	.401	.348	.489
60 or more hours	.318	.398	.454	.371	.357	.470
Female	.213	.237	.232	.242	.219	.314
1-14 hours	.160	.260	.230	.175	.117	.290
15-29 hours	.168	.185	.253	.182	.152	.275
30-34 hours	.195	.218	.229	.202	.209	.286
35-39 hours	.218	.264	.246	.275	.264	.331
40 hours	.230	.232	.227	.257	.238	.318
41-48 hours	.210	.240	.213	.242	.220	.336
45-49 hours	.202	.306	.270	.267	.212	.361
60 or more hours	.214	.316	.226	.287	.227	.364

tend to be on a 40-hour work week, whereas self-employed professional and managerial people work either shorter or longer hours.

CITIZENSHIP AND IMMIGRATION

In view of the particular circumstances concerning citizenship status and immigration as indicated earlier, American Indians and Puerto Ricans are excluded from this part of the analysis. Movement of Indians within the country and Puerto Ricans between the island and the mainland pose some important and interesting questions which will not be dealt with here.

The traditional advantage of native born workers is illustrated by the levels of occupational achievement for native white workers. Native white men and women achieve higher levels than the foreign born (Table 4.11). The mean occupation score in 1970 for native white men (.462) was higher than for the naturalized (.455) and alien (.444) white male. Native white women also reached higher levels (.316) than naturalized citizens (.283) and aliens (.262). Hence, the historical and expected pattern continues. Naturalized citizens rank intermediate to the native born and the alien. This is explained generally on the basis of the greater degree of assimilation and perhaps longer residence in this country for those who have become naturalized citizens.

Even though their backgrounds and experiences as immigrants differ considerably, the occupational ranking of Mexicans and Cubans by citizenship status is identical to that for white workers. Mexican native born men, for example, show a relatively high achievement level of .346, followed by an average of .310 for naturalized and .269 for alien Mexican male workers.

Occupational achievements of black workers by citizenship status show a different pattern, probably because relatively recent black immigrants are very different in their backgrounds from native American blacks. Naturalized black men and women show higher levels of occupational achievement than native blacks. Alien black men tend to surpass the naturalized black worker.

Aside from the question of citizenship, immigrants entered this country at different points in time, and this factor alone should influence their occupational achievement. In general it was expected that more recent immigrants would do less well in the labor market because of the relatively short period of time in this country.

Table 4.11. Mean Occupation Scores For Employed Persons, By Sex, Citizenship and Year of Immigration, 1970

Sex, Citizenship and Immigration	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.320	.320	.383	.365	.322	.461
Native born	.346	.317	.399	.361	.321	.462
Born abroad of Am. parents	.358	.468	.442	.468	.323	.513
Alien	.269	.330	.356	.445	.265	.444
Naturalized	.310	.378	.445	.398	.333	.455
Year of Immigration						
1965-70	.248	.310	.333	.468	.349	.462
1960-64	.268	.393	.426	.521	.394	.449
1955-59	.292	.314	.362	.465	.322	.447
1950-54	.312	.516	.391	.347	.383	.448
1945-49	.313	.312	.445	.449	.368	.480
1935-44	.311	.311	.403	.390	.307	.520
1925-34	.325	.338	.441	.315	.372	.439
1915-24	.307	.414	.447	.364	.351	.443
Before 1915	.315	.000	.421	.000	.313	.449
Not reported	.297	.465	.364	.344	.312	.438
Female	.205	.238	.230	.244	.219	.313
Native born	.227	.237	.299	.246	.220	.316
Born abroad of Am parents	.233	.394	.290	.382	.162	.353
Alien	.151	.221	.211	.224	.207	.262
Naturalized	.199	.236	.274	.190	.236	.283
Year of Immigration						
1965-70	.143	.182	.201	.215	.194	.267
1960-64	.159	.096	.259	.210	.265	.263
1955-59	.173	.167	.207	.215	.248	.269
1950-54	.175	.155	.204	.221	.245	.282
1945-49	.196	.382	.214	.229	.268	.312
1935-44	.219	.367	.384	.190	.312	.342
1925-34	.207	.045	.300	.154	.224	.263
1915-24	.187	.378	.447	.564	.223	.268
Before 1915	.178	.000	.051	.000	.167	.269
Not reported	.201	.373	.220	.171	.188	.297

Levels of achievement reached by white immigrants are consistent with the notion that more recent immigrants do not reach as high an occupational level as those who entered earlier. White immigrant men who came to the United States during the late 1940's reached the highest levels of occupational success (.520) of all white immigrant men. For white immigrant women, those who entered during the period from 1935 to 1944 reached the highest levels (.342). Effects of age, education and other factors on achievement are not controlled in these tabulations, and such more intensive analysis should be conducted. The lower levels of achievement for white workers who immigrated prior to say 1935 may be partly a function of their older ages in 1970. Recent immigrees, between 1965 and 1970, are likely to be relatively young and may possibly reach much higher levels when they get to the "peak achievement ages."

Native Mexicans and Cubans not only achieve higher levels than their foreign born members but they also show a relative gain in comparison with white men and women. Stated differently, this means that among aliens Mexican men and women suffer in comparison with whites. For Cuban aliens, men also do rather poorly in comparison with white aliens, but Cuban women fare better in comparison with white alien women.

Naturalized Cuban men and women attain occupational levels comparable to those reached by naturalized white men and women. This suggests that for Cuban immigrant men the total implications of the naturalization process bring them relatively close to the occupational achievements of white men. This is not so for Mexican men, since as naturalized citizens they average relatively low levels of occupational success.

MARRIAGE AND FERTILITY

Marital Status

Effects of marital status on occupational achievement are mostly indirect, but there is a general tendency for married men living with their wives to attain the highest levels of achievement (Table 4.12). For women, never having been married appears conducive to the highest attainment levels. For both men and women, widowhood and marital separation are related to the lowest levels of attainment.

Connections between marital status and occupational achievement are about the same for each of the minorities. Even though married

Table 4.12. Mean Occupation Scores For Employed Persons, By Sex and Marital Status, 1970

Sex and Marital Status	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.318	.384	.361	.321	.461
Married, spouse present	.342	.323	.393	.376	.332	.473
Married, spouse absent	.271	.270	.305	.344	.312	.429
Widowed	.287	.254	.334	.310	.277	.402
Divorced	.339	.346	.359	.353	.325	.421
Separated	.303	.301	.336	.333	.299	.409
Never married	.286	.306	.359	.297	.292	.399
Female	.213	.237	.232	.242	.219	.314
Married, spouse present	.218	.239	.223	.244	.233	.213
Married, spouse absent	.210	.227	.217	.208	.214	.303
Widowed	.190	.193	.158	.238	.157	.291
Divorced	.208	.217	.246	.262	.230	.310
Separated	.174	.219	.253	.190	.186	.265
Never married	.216	.255	.271	.249	.235	.344

minority men enjoy a slightly higher occupational status than their unmarried counterparts, they are not better off relative to married white men. Single compared with married women also register achievement gains, although single minority women evince this pattern to a much lesser extent than single white women.

Age at Marriage

Among married persons, the age at which the first marriage occurs has a bearing on occupational achievement (Table 4.13). In terms of occupational achievement, some people marry too young or too old. Those marrying at relatively young ages may have interrupted or terminated their education. There is also a possibility that their family socioeconomic status was relatively low which appears to produce a configuration of results, including early entry into marriage, early childbearing and entrance into the occupational system at relatively low points.

The optimum ages for marriage for white and black men are 25 to 29, where their mean occupation scores reach .484 and .336, respectively. White men who married at age 18 achieve a score of only .412, and blacks marrying at that age only .306. Optimal ages for marriage are younger for Indian and Spanish men. Although differences in occupational achievement are not great for those marrying just under or just over the optimal ages, marriage at ages 23 or 24 appears most favorable to the occupational achievement of Indian and Spanish men.

For women marrying for the first time, occupational achievement is highest if they marry at ages 23 or 24. In broader terms, marriage between about the ages of 21 and 29 seems conducive to higher occupational achievement. Cuban and Indian women show a slightly older optimum age, 25 to 29, for the highest levels of achievement.

Whatever the forces be that determine age at marriage, the consequences for occupational achievement appear clear.

Fertility and Achievement for Women

Childbearing and childrearing are traditional obstacles to employment and advancement in the occupational structure for women. Predictably, the more children a woman has had, the lower her level of occupational achievement (Table 4.14). Childless women consistently outrank mothers in the occupational structure, and, although the difference between having had one or two children does not much affect levels of achievement, mothers of four or more children rank far behind childless women and mothers of only one or two children. Both black and Mexican mothers of four or more reach only relatively low occupational levels, much lower than comparable white mothers.

Table 4.13. Mean Occupation Scores For Persons, by Sex and Age At First Marriage, 1970

Sex and Age at Marriage	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	.330	.315	.383	.359	.320	.462
14-17	.302	.291	.331	.339	.292	.403
18	.320	.333	.351	.355	.306	.412
19	.325	.321	.363	.355	.310	.426
20	.331	.316	.399	.347	.314	.441
21	.342	.323	.391	.367	.323	.460
22	.341	.325	.398	.374	.328	.474
23-24	.345	.327	.405	.380	.335	.481
25-29	.337	.317	.387	.358	.336	.484
30-34	.321	.300	.380	.345	.320	.464
35 or over	.288	.283	.334	.340	.296	.425
Female	.197	.221	.218	.220	.198	.293
14-17	.172	.206	.174	.199	.160	.225
18	.192	.211	.200	.203	.182	.245
19	.197	.210	.228	.220	.196	.263
20	.206	.233	.211	.229	.207	.288
21	.209	.235	.232	.237	.217	.324
22	.220	.241	.236	.224	.237	.351
23-24	.219	.230	.240	.241	.246	.352
25-29	.208	.238	.228	.253	.230	.347
30-34	.197	.216	.235	.245	.201	.337
35 or over	.181	.207	.199	.219	.172	.323

Table 4.14. Mean Occupation Scores For Ever Married Females By Number of Children Ever Born, 1970

Children Ever Born	Mexican	Puerto Rican	Cuban	Indian	Black	White
	.198	.226	.226	.223	.201	.298
None	.214	.254	.257	.249	.228	.335
One	.207	.226	.209	.229	.215	.297
Two	.207	.212	.220	.234	.217	.297
Three	.198	.229	.221	.226	.202	.285
Four	.196	.201	.194	.205	.180	.267
Five or more	.164	.199	.203	.189	.147	.236

The influence of children ever born on occupational attainment occurs as expected, but it must be emphasized that the number of children ever born is an indicator of cumulative rather than current or recent childbearing. For older women, their children may have reached ages where they are no longer heavily dependent on their mothers, and may even have left home. For such reasons as these, the presence of young children at home should provide a more direct and stronger indication of the restrictive influence of children on working mothers.

In examining occupational levels attained by women in relation to whether they have preschool-age children at home, contrasts are not as sharp as expected (Table 4.15). White women without preschool children at home score slightly higher than those with young children to care for, and the more young children at home the lower their levels of achievement. However, the range from the highest to lowest is not very great. White women with no preschool children average .307 which compares with those with two young children who average .278. Indian and Mexican women show the expected relationship of lower occupation scores with more young children at home. However, black, Puerto Rican and Cuban women present some "ripples" in the expected pattern. Black and Puerto Rican mothers with one preschool child at home fail to show lower achievement than women with no young children at home. The discrepancies are slight, but unexpected and statistically significant. More puzzling is the relatively high achievement of Cuban mothers of two preschool children. (Oriental mothers of preschool children are quite the opposite of whites. Japanese, Chinese, Filipino and Korean mothers of preschool children all rank higher on the occupational scale than women without young children at home.)

DISSIMILARITIES IN ACHIEVEMENT

Differences in occupational achievement can be summed up on the basis of the index of dissimilarity, which shows the amount of occupational redistribution necessary to bring about equal distributions. Approximately a third of minority men and also minority women would need to shift, mostly toward white-collar occupations, in order to accomplish the same occupational distributions as white men and women (Table 4.16). The degree of dissimilarity is amazingly alike for most of the minority men and women. The D-index is identical for Mexicans, Puerto Ricans and blacks where, for example, 30% of Mexican men would need to shift occupations, the same percentage as for Mexican women to attain equality with white women. Cuban men and women represent the only real departure from

Table 4.15. Mean Occupation Scores For Females By Number of Children Under 6 in Household, 1970

Number of Children Under 6	Mexican	Puerto Rican	Cuban	Indian	Black	White
	.198	.218	.223	.225	.224	.300
None	.203	.215	.224	.238	.231	.307
One	.201	.229	.210	.218	.233	.291
Two	.190	.215	.261	.212	.202	.292
Three or more	.172	.193	.223	.198	.170	.278

Table 4.16. Occupational Dissimilarities*

Population	White male	White female	Male-female
Mexican	.30	.30	.44
Puerto Rican	.32	.32	.36
Cuban	.18	.32	.41
Indian	.24	.27	.48
Black	.34	.34	.45
White	---	---	.44

*Based on Table 4.01.

this pattern. Only about one in five Cuban men would need to change occupations to produce the same distribution as for white men.

Finally, the extent of the sex gap in occupational achievement is emphasized in the last column (Table 4.16). With the exception of Puerto Ricans, more than 40% of each of the groups of women would need to change occupations in order to attain equal distributions with their male counterparts. These summary measures underscore what has been apparent throughout this discussion, namely that the degree of separation in the occupational achievements of men and women is greater than that between minorities and whites within each of the two sex groups.

To interpret the dissimilarity values (in Table 4.16) as measures of discrimination is unwarranted unless one wants to make the assumption that all of the groups involved in comparisons are equally qualified. Earlier evidence indicated that the achievement gap narrows at higher educational levels and that discrimination is more nearly confined to those with lower degrees of educational preparation. Furthermore, the color-ethnic minorities in this study average less schooling than whites. Consequently, the D-values shown here do not account adequately for differences in qualifications for occupational achievement. Nevertheless, differences in occupational distributions show rather clearly that there is a substantial degree of occupational segregation, especially between the sexes, which can only be significantly reduced by relatively wholesale changes in the occupational distribution.

SUMMARY AND CONCLUSIONS

Summary

In comparison with the occupational achievement of white workers, minority men and women in this study generally are much lower. Inequalities in levels of occupational achievement for Indian, Mexican, Puerto Rican, Cuban and black workers, implied from differences in occupational distributions, are more clearly established when occupational achivement is measured on a scale. Minority men rank behind white men in this order: Cuban, Indian, Mexican, black and Puerto Rican. The rank ordering for women is slightly different, with Indian, Puerto Rican, Cuban, black and Mexican women in that order behind white women. Without exception, all groups of women rank beneath the achievement levels of men.

As a measure of the unevenness of the distributions of workers among major occupation groups, the index of dissimilarity indicates that anywhere from a fifth to a third of minority workers would need to be shifted to other, and generally higher, occupations in order to obtain equality with white workers. Furthermore, for the five-year period from 1965 to 1970, there is little evidence that dissimilarities in occupational distributions diminished appreciably.

Differences in levels of achievement between white and minority workers were expected to diminish when workers with similar qualifications were compared. Under the most favorable of conditions, achievement differentials did in fact diminish. The most striking case was the convergence of mean occupation scores for college graduates, where differences in achievement tend to disappear. The move toward convergence in occupational achievement was also evident but far less dramatic when controls were introduced one at a time for vocational training, disability and weeks worked. In brief, minority workers come closer to matching the achievement of whites if they have attained higher levels of education, had some vocational training, are free from a disability and work full-time.

The gap in occupational achievement between white and minority workers tends to be greatest for the most disadvantaged minorities, particularly those with low levels of educational attainment, without job training and who are employed on a part-time basis. Minority workers with no more than an elementary level of education, for example, are less well off than white workers with relatively little education.

The sex gap in occupational achievement is more evident and more extreme than that between whites and minority workers. Other than exceptionally well qualified women, say college graduates, women generally fail to reach the achievement levels of men.

Color-ethnic and sex minorities show higher levels of achievement under certain kinds of conditions--circumstances that do not necessarily have a connection with skill qualifications for higher levels of achievement. Employment in certain industries rather than others results in higher levels of achievement on the average. Employment in a governmental unit more often results in higher achievement than employment in private business. Men who are married and living with their wives show greater occupational achievement than other men, but never married women attain higher levels than their married counterparts. Having children is one of the retarding factors in women's achievement. Childless women typically score higher on the occupation scale than mothers, although there are indications that some women with young children at home compare favorably with childless women. While there seems to be an ideal age for marrying in terms of reaching higher levels of occupational achievement, it is not clear that marriage at these optimum ages reduces differences in occupational achievement between minorities and whites.

Finally, for white workers there is evidence that foreign born workers are discriminated against in favor of native whites. However, this pattern does not apply consistently to minorities. Mexican and Cuban native born workers also achieve higher levels than naturalized and alien workers, but other minorities depart from this pattern. Naturalized blacks achieve higher levels than native blacks.

CHAPTER 5

DISCREPANCIES IN OPPORTUNITIES FOR ADVANCEMENT

Movement of workers between jobs is a major factor influencing their occupational attainment, which is the outcome of a lifelong process beginning with characteristics ascribed at birth. People in all societies are treated from birth onward in accordance with socially prescribed definitions of such characteristics as sex and family status. Yet, in moving through the life cycle, individuals acquire new and different traits and modify previously acquired attributes. Knowledge and skill, for example, can increase. At any given point in time a person's "life chances" are determined to a great extent by the combination of his ascribed and acquired characteristics. Occupational mobility is thus a result of the convergence of numerous factors, including prior occupational achievement and mobility.

As minorities, Spanish, Indians and blacks, and women too, have typically been handicapped in the United States because of both their ascribed and acquired characteristics. On ethnic, race or sex grounds, some individuals have been accorded an inferior status, and, regardless of the interplay between ascribed and achieved qualities, the net result has been low average achievement, as noted in the last chapter. Hence, when it comes to questions of occupational mobility, these minorities start with handicaps that are difficult to overcome. For these kinds of reasons, it is anticipated that occupational mobility will be less beneficial for minorities than it is for majority workers.

Three objectives in this chapter are to (1) examine the dynamics of the occupational structure, (2) evaluate conditions that influence the direction and distance of occupational mobility, and (3) determine the consequences of mobility for the achievement of mobile workers at their destination occupations. In contrast with earlier chapters, attention is directed to movers, i.e., workers who changed jobs between 1965 and 1970. Dynamics of the occupational structure involve patterns of movement or flows of manpower between occupations. A central concern at this time is the question of whether such movement reflects discrimination. Part of this flow between occupations is a resultant of changes in the occupational structure itself, changes that tend to force some workers to change jobs. In the absence of discrimination, forced mobility should be distributed evenly. The basic elements and components of mobility are also important in considering mobility dynamics. An occupational origin is related to a worker's chances for being mobile, and, for movers, to the level and kind of destination occupation. Occupational origins and destinations serve further to help determine the direction and distance of occupational mobility--two of the major components of the mobility process. Direction and distance can be ascertained once numerical values have been assigned to occupations as an indicator of their position in the occupational hierarchy. Occupation scores, as discussed in the previous chapter, provide the necessary first step for investigating both direction and distance of mobility.

Educational attainment is expected to be a major determinant of the direction and distance of occupational mobility, just as it was an important influence on the level of occupational achievement in 1970. A number of factors besides educational attainment undoubtedly influence mobility, and among these are ethnic, race and sex characteristics. It is not possible to account here for many background factors, and attention will be directed primarily to the influence of educational attainment. In the simplest terms, persons with similar education should be equally mobile and should move upward (or downward) about the same distances.

Finally, the "payoff" of occupational mobility is the improvement workers accomplish by moving to different jobs. Under conditions of equal opportunity, minority workers should move into higher-ranking occupations about as frequently as majority workers. Differences in the occupational destinations of movers therefore may be indicative of unequal opportunities for "getting ahead."

THE INCIDENCE AND EFFICIENCY OF MOBILITY

The stereotyped image of Americans as highly mobile is supported by the overall incidence of occupational mobility but not necessarily by an upward movement. Between 1965 and 1970, anywhere from about a third to a half of Spanish origin, Indian and black workers changed occupations.

Several points need to be made in relation to the following analysis. Occupational mobility is defined here as a difference in occupations contained in the census detailed list of over 400 occupations for persons employed in both 1965 and 1970. The frequency of moves among a relatively long list is greater than it would be if only major occupation groups were used. There are at least minor difficulties in determining the "true" incidence of occupational mobility from census data since there is no way of knowing how many occupations a worker may have held during this five-year period or whether a worker in 1970 may have returned to the same occupation he had in 1965. What these data show then is the net result of movement, which makes it necessary to assume that multiple moves and returns to an origin occupation are relatively infrequent and distributed evenly among all groups of workers.

Among men, Cubans are the most and blacks the least occupationally mobile of all the groups (Table 5.01) Between 1965 and 1970, more than half of the Cuban (52%) and 36% of the black men changed occupations. However, blacks are nevertheless relatively more mobile than Oriental workers in the U.S. (See Volume II of this report). Mexican and Puerto Rican men are slightly more mobile than blacks, and Indian men rank second behind Cubans in the incidence of movement. With the exception of black, all Spanish and Indian men are more mobile than white men.

The frequency of occupational mobility for women is consistently lower than for their male counterparts, and the intergroup pattern for women is not the same as for men. Indian women are most mobile (44%) and Puerto Rican women the least (34%). The overall range of difference in occupational movement among women is less than for men.

Mobility is more prevalent at the younger ages, where upwards of half of all Spanish origin, Indian, black and white men moved to a different occupation. Women too are more mobile at the younger ages, as evident by the 40% or more at ages under 35 who moved between jobs; for Cuban, Indian and black young women, about half did in fact move during this period.

A high rate of turnover within an occupation is indicative of inefficiency in occupational movement, whatever the reasons may be for making occupational changes. Whenever a large number of workers leave and enter an occupation and the net change from mobility is small,the movement is inefficient. Comparisons show considerable variation in efficiency of occupational movement, both among major occupation groups and among minorities (Table 5.02). For Mexican men moving to and from sales occupations, a total of 141 moves were required in order to bring about a net increase of one mobile Mexican man in sales work. Cuban men were even less efficient in moving in and out of professional occupations, requiring 149 moves, only to wind up with a net loss. The most extreme case of all, however, occurs for Mexican women in service occupations, where a total of 341 moves were necessary to bring about a change of one. At the other extreme, there are several instances where fewer than 10 moves result in a change of one worker in an occupation. Movement to and from farm occupations is more efficient for all groups of workers than moves for other occupations. Mexican, Puerto Rican and Cuban men, for example, average less than two moves in accomplishing a change of one in farm occupations.

The efficiency values show which occupations involve the least or most efficiency in mobility for a particular group and a particular occupational category, but they do not permit easy generalizations about patterns of efficiency since there are numerous variations. The absence of totally clear patterns suggests that the efficiency of occupational mobility is not attributable to particular occupations. Possible exceptions to this appear

Table 5.01. Incidence of Mobility Between Occupations, by Sex and Age*

Sex and age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Employed	19,765	4,259	2,643	2,437	54,642	653,650
Percent mobile						
1965-70	39.3	41.1	52.0	45.8	36.3	37.1
Under 35	53.6	51.6	60.9	59.2	51.4	55.1
35-49	33.9	35.0	50.5	43.2	33.5	34.0
50-69	26.9	26.7	46.2	31.4	26.0	28.2
Female						
Employed	8,728	2,028	1,455	1,349	43,677	358,964
Percent mobile						
1965-70	38.2	34.4	39.7	43.7	35.0	36.8
Under 35	45.7	41.5	51.8	49.2	48.7	45.8
35-49	34.8	30.6	39.1	41.0	33.0	35.3
50-69	27.4	22.5	28.2	39.3	23.9	31.0

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*Figures are based on a 2% sample of whites and blacks and 3% sample of Spanish and Indians employed in 1965 and 1970.

Mobility is defined as the difference in the 3 digit occupation codes for 1965 and 1970.

Table 5.02. Efficiency of Occupational Mobility by Sex, and Occupation

Sex and Occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Professional	22.9	6.3	-149.0	7.8	17.0	12.0
Managerial	8.0	5.7	-34.4	3.8	3.6	5.4
Sales	141.0	-16.7	-12.6	7.3	-31.7	-19.4
Clerical	7.6	6.3	27.7	11.6	16.6	40.2
Crafts	4.5	11.4	12.2	15.5	4.4	10.3
Operatives	11.1	-18.6	10.9	38.2	11.2	-8.7
Transp. equip.	17.1	4.2	-7.2	11.0	16.4	-37.3
Laborer	-12.4	-14.4	69.0	-4.3	-6.0	-4.6
Farmer	-1.8	-1.0	-1.2	-1.8	-1.4	-2.4
Farm laborer	-1.8	-1.6	-1.4	-3.6	-3.0	-4.6
Service*	47.9	-22.5	27.4	3.8	-15.6	27.7
Female						
Professional	11.1	-8.7	-19.5	13.4	36.5	11.2
Managerial	16.6	6.6	4.6	-39.0	4.3	14.4
Sales	-3.8	-4.8	-3.1	-41.0	-7.2	-7.8
Clerical	5.1	4.9	6.0	8.2	3.6	13.6
Crafts	4.0	17.0	4.1	7.7	16.5	9.2
Operatives	30.2	-9.9	-7.9	-24.2	8.2	-59.6
Transp. equip.	-13.0	---	---	---	5.1	8.7
Laborer	-6.4	-4.0	-1.8	-8.0	-55.8	-8.0
Farmer	-2.7	---	---	-1.4	-1.2	-1.4
Farm laborer	-2.7	-2.7	---	4.2	-2.9	4.9
Service	341.0	10.8	5.8	-22.0	75.5	-8.9
Private house.	-8.7	---	---	-43.0	-3.2	7.4

*Including private household service worker for farm occupations, with their relatively high efficiency of moves, and for minority women moving to and from clerical occupations.

Efficiency is neither consistently high nor low for other occupations. An alternative explanation is that high or low degrees of efficiency might be attributed to particular subgroups in the population. White workers are relatively inefficient in their mobility, as indicated roughly by the fact that white men require at least 10 moves in six of the major occupation groups to gain or lose one worker. For white women, the efficiency indicator is 10 or higher in only five of the twelve occupations. Other groups such as Mexican men and women, appear about as inefficient as white movers when judged on this basis. It seems more likely that the degree of efficiency in mobility reflects differences in opportunities for mobility and in work conditions specific to an occupation and subgroup of workers. These speculative interpretations are suggestive and inadequate to explain questions of efficiency of occupational mobility, and they underscore the need for a much more intensive investigation than is possible in this report.

STRUCTURAL CHANGE AND MOBILITY

The interchange of workers between occupations is partly "free" and partly the result of changes in the occupational structure that have the effect of forcing some workers to move. Mobility is forced whenever the number of workers in an occupation in 1970 is smaller than the number employed in that occupation in 1965. An inescapable result of such a decrease is the movement of some number of workers either to another occupation, to the ranks of the unemployed or out of the labor force entirely. For purposes of this analysis, the occupational structure is regarded as a closed system, that is, only workers employed in both 1965 and 1970 are included. This means that workers forced from one occupation in 1965 must be located in another by 1970. Those employed in 1965 but not in 1970 are ignored, although ultimately they must be included in an analysis of the flow of manpower.

Among all occupationally mobile workers in the United States--including all heritages and colors and both sexes--10% were forced to move between major occupation groups between 1965 and 1970 (Table 5.03). However, this indication of the magnitude of forced mobility is an understatement of the degree of forced movement and probably misleading for at least two reasons. Since only moves between major occupations rather than detailed occupations are included, the potential frequency of movement is more limited. Secondly, and perhaps more importantly, the national average of 10% is based on all workers regardless of origin, color or sex, which suggests that forced mobility is distributed evenly among all groups of workers.

Table 5.03. Forced Mobility Under Alternative Assumptions

Spanish origin, color and sex	Percent of movers forced
Open competition:	
All workers	10.0
Sex segregation:	
Male	11.0
Female	8.7
Spanish origin-color segregation:	
Mexican	14.8
Puerto Rican	12.2
Cuban	7.7
Indian	11.5
Black	14.6
White	10.1
Sex and Spanish origin-color segregation	
Mexican: male	15.5
female	12.4
Puerto Rican: male	12.4
female	15.4
Cuban: male	7.9
female	18.0
Indian: male	15.3
female	8.2
Black: male	14.5
female	15.4
White: male	11.2
female	9.2

When forced mobility is measured separately for each of the minority groups, the importance of ethnic-color-sex differences becomes more evident. The lower panel of Table 5.03 presents these results. Cuban women are most subject to the impact of forced mobility (18%), whereas Cuban men and Indian women (8%) along with white women (9%) are the least forced in their mobility. Among men, Mexicans, Puerto Ricans, Indians and blacks are relatively more forced than white men. Only Cuban men were less exposed to forced mobility than whites. White women were less influenced by forced mobility than all other women, except for Indians. These results suggest strongly that the degree of forced mobility is not distributed uniformly.

Forced mobility can be viewed as operating within each of the Spanish origin and color groups regardless of sex differences. Under this condition, Mexicans and blacks bear the greatest burden of forced moves (15%), and Cubans the least (8%). With the exception of Cubans, forced mobility is greater for all minorities than for whites. What happens with the incidence of forced mobility when sex (or other) differences are ignored is that Mexican men, for example, have an opportunity to move to jobs otherwise available only to Mexican women as well as to "Mexican male jobs."

If ethnic-color differences are ignored, men feel the impact of forced mobility more than women. Between 1965 and 1970, 11% of occupationally mobile men were forced to move because of decreases in the employment of men in several kinds of jobs. In comparison, only 9% of the mobile women were forced to move.

Two points about forced mobility need to be emphasized. First, forced mobility is unequally distributed among ethnic-color-sex groups, but the magnitude of this forcing for some groups is undoubtedly greater than indicated by the data shown here. If age or regional criteria were added, or if a detailed occupation list were used, the empirical results should reflect greater disparities than those shown in Table 5.03. Second, reduction of discrimination in forced mobility should minimize the impact of decreased employment opportunities for groups now exposed to a relatively high risk from forced moves. Finally, it has been implicit but should be stressed that the majority of all occupational changes are free from the influence of changes in the occupational structure.

Differences in Direction of Mobility

In the general "flow of manpower" within the occupational structure, many workers fail to realize the American Dream of "getting ahead." The chances of moving up the occupation scale, rather than down, are a little better than 50-50 for men but less than that for women (Table 5.04).

Young workers are more likely to move than older workers, and, when they are occupationally mobile, they also are more likely to move upward. About three out of five young men (under 35) had higher occupation scores in 1970 than in 1965. At ages 50 to 69, about half of all occupationally mobile men achieve higher occupational status. Young women (under 35) are about as successful as older men (50-69) in achieving upward mobility. The decrease in the proportions of movers going up the occupational scale at older ages means that more than half of occupationally mobile women at ages 50 to 69 experience a decrease in occupational standing.

Among occupational movers, white men are most likely to move upward, but Mexican, Indian and black men are almost as upwardly mobile as white men. Cubans are the least upwardly mobile (53%) among men. Black women are more upwardly mobile (56%) than all other groups of mobile women, whereas Puerto Rican women are least likely to be upwardly mobile (41%). Only Puerto Rican women, in fact, are less upwardly mobile than white women. In general, it appears that age and sex differences in the direction of occupational mobility are greater than differences among the color-ethnic minorities.

Not all occupational mobility results in vertical movement. A relatively small fraction involves occupation changes that are essentially horizontal, i.e., a change in occupation classification without an accompanying change in occupation score. Such horizontal movement is often on the order of 1-3% of all occupational movement. For all Spanish origin, Indian, black and white movers, this is about the magnitude of lateral occupational shifts. For women, however, horizontal moves are more frequent. Black mobile women are most likely to change occupations without moving vertically in the occupation structure. At ages 35 to 49, 6% of all black women movers move horizontally, and at ages 50 to 69 this percentage rises to 15%. Mexican and Indian mobile women at ages 50 to 69 also show a tendency toward increased lateral moves, with about 7% of their moves being horizontal.

Table 5.04. Percentages of Mobile Workers Moving Upward by Sex and Age[*]

Sex and ages	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	59.3	56.0	52.9	58.5	57.7	59.8
Under 35	62.3	56.9	62.6	59.6	60.1	64.5
35-49	57.9	56.7	48.8	56.4	57.2	59.7
50-69	52.9	49.2	48.4	59.7	52.9	53.8
Female	49.1	41.2	48.9	49.6	56.2	47.2
Under 35	52.9	49.6	46.1	52.2	58.3	52.9
35-49	46.2	50.2	51.4	48.3	56.3	48.3
50-69	40.8	38.7	48.6	46.7	51.2	39.5

[*] Figures based on changes in occupation scores between 1965 and 1970.

Distance and Direction

Levels of occupational achievement represent the culmination of many things, including the incidence and direction of occupational mobility, and also the distance of movement, either upward or downward. Most occupational changes are likely to involve short distances, between occupations that are relatively similar in skill requirements and standing in the hierarchy. Moves are much more likely between highly similar jobs, such as between sales and clerical jobs, or between unskilled and semiskilled manual jobs than between very dissimilar jobs.

The distance component of occupational mobility has received little attention in most studies, mostly because of the lack of adequate measures. Possibilities for describing and assessing the distance component are much more feasible with the development of occupation scores. Methods were developed for this study for determining distances of occupational moves upward and downward. Occupation scores were assigned to workers in accordance with their occupations in 1970 and 1965 for all workers employed at both times. The standing of occupations themselves probably did not change during this 5-year period, and, once the occupation scores were assigned to individual workers, it became a simple matter to determine the difference between scores for 1965 and 1970.

However, a more refined measure was sought since an occupation score in 1970 is dependent on a worker's level of achievement in 1965. A measure of the distance up or down the occupation scale, a Relative Mobility Score (RMS) appears to solve many of the measurement problems. (See Appendix A for a more detailed discussion). RMS represents the fraction of the maximum possible distance, up or down, regardless of the level of occuptional origin. The RMS index can range from a maximum of +1.0 or -1.0, depending on direction of movement, to zero. Nonmovers (or stayers), of course have a score of zero, since their occupation scores are the same at each point in time. Movers were assigned an RMS in accordance with the fraction of the distance moved. As a measure of distance, RMS has the advantage of permitting comparisons among mobile workers independent of their levels of occupational origin. A worker whose occupation score in 1965 was .60 and in 1970 was .80 moved half of the distance toward the highest occupation score. Another worker whose scores changed from .20 to .60 has also moved half of the distance upward. For downwardly mobile workers, a similar interpretation can be made. If a worker's occupation decreases from .60 to .30, he has dropped half of the distance toward zero.

Results of applying RMS show for upwardly mobile workers that (1) among men whites move a greater distance upward than Spanish, Indians and blacks, whereas black,Puerto Rican and Mexican men move the shortest distances upward, (2) among women, whites move upward the greatest distance, followed by Indians and Cubans, while black, Mexican and Puerto Rican

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women move the shortest distances, and (3) men almost invariably move further distances upward than women (Table 5.05). The notable reversal between the sexes occurs for blacks, where women average slightly longer distances upward than men. Among upwardly mobile men, those with relatively high levels of achievement, as shown in the last chapter, also move the longest distances upward. White and Cuban men, for example, move longer distances upward than Mexican, Puerto Rican, Indian and black men, thereby widening the achievement gap. White women move further upward than other women, although not as far as white and Cuban men.

Upwardly mobile workers cover about a fourth of the distance toward the top of the occupational hierarchy, but for those dropping downward the distance toward the bottom is relatively greater. Results for downwardly mobile workers show (1) Cuban men losing the most in occupational status and whites the least among men, while blacks, Mexicans, Puerto Ricans and Indians are about midway between the extremes in average distance lost, (2) Mexican, Cuban, Indian and black women drop about halfway toward the bottom of the occupational structure, and (3) the downward mobility of women typically covers a greater distance than for men. A major consequence of the up and down distance patterns is the accentuation of differences between workers with relatively high and low achievement patterns. Mexican men and women illustrate a pattern whereby they begin at low achievement levels from which they move short distances upward and long distances downward.

INFLUENCES ON MOBILITY: EDUCATION, CITIZENSHIP AND FERTILITY

Education

The importance of education as a major determinant of levels of occupational achievement is enhanced by its contribution also to mobility. High educational attainment serves a dual purpose of stimulating upward mobility and deterring downward mobility. Evidence of this is provided by data for young mobile workers, an age level where mobility rates are high. The mean RMS values for men under 35 years of age tend to support this observation (Tables 5.06 and 5.07). As an example, American Indian men at these ages move upward only about 17% of the distance if they attain an eighth grade education, whereas they cover 80% of the distance upward if they reach college graduation.

Table 5.05. Mean Relative Mobility by Sex, and Direction of Mobility

Direction of mobility	All	Male	Female
Upward			
Mexican	.207	.213	.189
Puerto Rican	.205	.209	.193
Cuban	.255	.263	.234
Indian	.227	.231	.221
Black	.203	.199	.208
White	.270	.281	.244
Downward			
Mexican	.399	.345	.503
Puerto Rican	.387	.352	.464
Cuban	.414	.379	.491
Indian	.402	.345	.494
Black	.417	.334	.525
White	.374	.320	.449

Table 5.06. Mean Relative Mobility for Mobile Men Under 35 Years of Age by Color, Origin, Education and Direction of Mobility

Direction and years of school completed	Mexican	Puerto Rican	Cuban	Indian	Black	White
Up						
Elem: 1-7	.183	.188	.187	.194	.154	.176
8	.201	.183	.183	.167	.174	.184
H.S.: 9-11	.204	.193	.211	.188	.176	.200
12	.230	.249	.276	.234	.211	.255
College: 1-3	.317	.302	.307	.278	.301	.339
4	.544	.371	.639	.795	.445	.454
5 or more	.508	.586	.510	.513	.493	.531
Down						
Elem: 1-7	.370	.333	.382	.380	.342	.302
8	.320	.340	.461	.363	.337	.301
H.S.: 9-11	.039	.344	.331	.333	.319	.294
12	.327	.367	.323	.362	.315	.300
College: 1-3	.344	.335	.401	.275	.314	.309
4	.297	.262	.324	.245	.247	.269
5 or more	.284	.126	.291	.365	.228	.247

Table 5.07. Mean Relative Mobility Scores for Mobile Women Under 35 Years of Age by Color, Origin, Education and Direction of Mobility

Direction and years of school completed	Mexican	Puerto Rican	Cuban	Indian	Black	White
Up						
Elem: 1-7	.153	.160	.103	.087	.152	.165
8	.133	.128	.197	.112	.158	.175
H.S.: 9-11	.166	.177	.180	.227	.165	.189
12	.201	.161	.187	.216	.196	.203
College: 1-3	.223	.318	.196	.303	.244	.270
4	.511	.635	.424	.427	.462	.506
5 or more	.545	.247	.426	---	.525	.514
D[illegible]						
El[illegible]	.558	.547	.659	.437	.628	.546
[illegible]	.530	.359	.501	.612	.547	.534
H.[illegible] 9-11	.451	.437	.496	.641	.521	.484
12	.438	.399	.349	.403	.450	.401
College: 1-3	.477	.521	.344	.327	.403	.396
4	.513	.535	.685	.216	.303	.391
5 or more	.323	.293	.130	.391	.269	.354

Downwardly mobile young Indian men drop 34% of the distance toward zero if they have an eighth grade education but only 25% of the distance downward if they are college graduates. This stimulating and deterring influence of educational attainment is not quite so clear for women, but generally seems to apply.

In general, men who completed four years of college and who were upwardly mobile move a longer distance upward than those who move downward. The contribution of a college education is therefore relatively strong in upward mobility and also acts as a deterrent to downward movement. However, below the college level, i.e., high school graduation or less, both the encouraging and deterring effects of education on distances are reversed, since those moving upward move shorter distances than those going downward.

At the level of high school graduation, which includes substantial numbers of men among those under 35 years of age, white workers move a longer distance upward than Mexicans, Puerto Ricans, Indians and blacks, although the differences are not very great with the possible exception of young blacks. Young Cuban high school graduates ascend further upward than comparable whites. Young white high school graduates also appear to be slightly favored in their downward movement inasmuch as they do not drop quite as far as each of the minority men. Except for Puerto Rican and Indian men, however, again the differences are not very great.

Minority men who attain a baccalaureate degree from college are generally about as successful in their upward movement as whites. However, Puerto Rican college graduates move only 37% of the distance upward as compared with about 45% of the distance for white (and for black) upwardly mobile workers. Mexican, Cuban and Indian college men move upward even further on the average than white men. Indian college men moving upward, in fact, go 80% of the distance upward. Downwardly mobile college graduates descend about a fourth of the distance toward the bottom, with Cuban and Mexican men dropping further than others.

Among all the young mobile men, whites appear to be slightly more favored than minority men. The patterns are not totally or consistently in one direction, but in 23 of the cells (Table 5.06) the RMS values for the upwardly mobile are as high or higher for whites than for minority men. For the downwardly mobile, this gauge indicates that whites move shorter distances downward than minority men in 29 of the 35 cells.

Occupationally mobile women also benefit from higher education. Women, however, do not benefit as consistently in their upward moves and lose more in occupational status by their downward moves than men. In comparison with minority women, white women show as high or higher RMS values in 25 cells (Table 5.07) for the up-movers, and white women move shorter distances than minority women in 19 of the 35 cells. The distances upward for women are noticeably less than downward distances, especially for those with less than a college education. The deterring influence of education is much less apparent among women, since many minority women with relatively high levels of education experience substantial loss of occupational status. Cuban college women illustrate an extreme case; they drop 68% of the downward distance, whereas Cuban high school women descend only about a third of the distance downward.

Citizenship

The net influence of nativity and citizenship on distances and direction of occupational mobility presents a very mixed picture (Tables 5.08 and 5.09). In general, the evidence provides no support consistently favoring the native born over naturalized citizens or aliens. Upwardly mobile Mexican men average about 21% of the upward distance, and this measure differs only slightly by nativity and citizenship. There is a mild indication that alien Mexican men do not move as far upward, since their movement covers about 18-19% of the upward distance. There is also an indication that downwardly mobile Mexican origin men at the youngest ages do not descend as far if they are native Americans. Among Mexican mobile women the pattern is similar, with native born and naturalized citizens appearing to have a slight edge over aliens, in both upward and downward distances.

Among occupationally mobile Cubans, upwardly mobile naturalized Cuban men younger than 50 years of age move longer distances than either native born or alien men. Also, among the downwardly mobile Cuban men, descent is further for natives and aliens than for naturalized persons at all age levels. The pattern of mobility distances for Cuban men resembles that for Cuban women, generally favoring the naturalized citizens.

For black and for white mobile workers, the patterns differ. Upwardly mobile alien men younger than 50, for example, move upward further than native and naturalized blacks and whites. But for women this is not the case. Among the upwardly mobile, alien black and white women show a slight but not totally consistent advantage. Among the downwardly mobile, the native born, especially men, suffer less loss of occupational status than foreign born movers.

Mexican, Cuban and black movers neither gain nor lose in general in comparison with whites when distances are compared by nativity and citizenship. Puerto Ricans and Indians are not included in these comparisons because of the heavy preponderance of native born in these two populations. There are, of course, important exceptions to the overall patterns. For example, upwardly mobile native and naturalized Cuban men younger than 35 move further upward than comparable white men. Mexican men and women consistently move shorter distances upward and longer distances

Table 5.08. Mean Relative Mobility for Mobile Mean by Age, Citizenship, Direction of Mobility, Color and Origin

Age, citizenship and direction of mobility	Mexican	Cuban	Black	White
Up				
Under 35				
Native born	.225	.332	.211	.285
Naturalized	.220	.373	.244	.310
Alien	.196	.270	.287	.296
35-49				
Native born	.216	.198	.200	.285
Naturalized	.218	.257	.225	.295
Alien	.183	.211	.275	.283
50-69				
Native born	.203	.308	.170	.268
Naturalized	.191	.263	.195	.274
Alien	.178	.268	.125	.268
Down				
Under 35				
Native born	.319	.508	.317	.295
Naturalized	.332	.278	.381	.325
Alien	.393	.375	.369	.304
35-49				
Native born	.339	.389	.329	.307
Naturalized	.348	.360	.392	.323
Alien	.336	.399	.379	.330
50-69				
Native born	.372	.369	.362	.356
Naturalized	.400	.321	.416	.389
Alien	.379	.403	.524	.382

Table 5.09. Mean Relative Mobility for Mobile Women by Age, Citizenship, Direction of Mobility, Color and Origin

Age, citizenship and direction	Mexican	Cuban	Black	White
Up				
Under 35				
Native born	.192	.189	.206	.251
Naturalized	.188	.275	.198	.242
Alien	.185	.196	.206	.255
35-49				
Native born	.189	.274	.216	.240
Naturalized	.198	.300	.200	.241
Alien	.163	.192	.189	.269
50-69				
Native born	.193	.237	.199	.237
Naturalized	.215	.348	.187	.237
Alien	.157	.237	.212	.203
Down				
Under 35				
Native born	.458	.447	.469	.414
Naturalized	.496	.371	.611	.412
Alien	.554	.448	.603	.482
35-49				
Native born	.506	.277	.528	.443
Naturalized	.519	.382	.460	.478
Alien	.616	.542	.655	.471
50-69				
Native born	.553	.553	.627	.482
Naturalized	.591	.636	.615	.496
Alien	.559	.540	.647	.530

downward than whites regardless of nativity. The distances moved by Mexican workers compare unfavorably with those for whites, but there is no appreciable modification of the general pattern by nativity and citizenship.

Children and Mobility

The occupational mobility of working mothers is reduced by virtue of motherhood and the presence of young children at home. Hence, compounding the lower levels of labor force participation and occupational achievement for mothers with larger numbers of children, occupational mobility is also less rewarding for mothers of larger, rather than smaller, numbers of children. The distance of upward mobility is inversely related and the distance of downward mobility is directly related to the number of children ever born (Table 5.10). At ages 25 to 34, white childless women average about 30% of the distance toward the top of the occupational structure, and this distance decreases steadily for mothers with children to the point where mobile white mothers with five or more children move upward only about 21% of the possible distance. Upwardly mobile childless white women therefore move about half again as far upward as mothers of five or more children. At the next older age level, 35 to 44, the relationship between distance of upward mobility and children is about the same. Upwardly mobile Cuban and black women manifest the same type of pattern, although they typically do not move as far upward as white women. For Mexican women, however, the number of children born bears little relationship to upward mobility. Childless Mexican women do not move further up the occupational ladder than mothers, with the possible exception of mothers of four or more children. For Puerto Rican and Indian women, the figures leave in doubt the impact of offspring on upward mobility.

Larger numbers of children ever born seem conducive to greater losses in occupational status for downwardly mobile women. Furthermore, this pattern is clearer for women at ages 25 to 34 than at 35 to 44. Childless downwardly mobile women tend to lose less in status than downwardly mobile mothers. Childless Mexican women at ages 25 to 34, for example, descend 43% of the distance downward, whereas mothers of four or more drop about 48% of the distance. Mexican and Puerto Rican mothers of one child, in contrast with whites, show a tendency to drop relatively great distances downward, an exception to the general pattern. RMS's for Cuban and Indian women are rather erratic for no apparent reason.

The presence of preschool children at home serves to shackle the upward mobility and stimulate longer distance of downward mobility (Table 5.11). Among upwardly mobile women, the pattern of shorter distances with increases in young children at home generally holds true.

Table 5.10. Mean Relative Mobility for Women 25 to 44 Years of Age by Number of Children Ever Born

Age, direction and children born	Mexican	Puerto Rican	Cuban	Indian	Black	White
25-34						
Up						
None	.198	.194	.270	.329	.247	.298
One	.183	.209	.219	.200	.221	.265
Two	.195	.175	.238	.159	.220	.240
Three	.191	.161	.148	.258	.202	.224
Four	.169	.154	.206	.147	.184	.210
Five or more	.184	.225	---	.185	.184	.209
Down						
None	.432	.362	.381	.406	.434	.379
One	.489	.466	.491	.417	.447	.403
Two	.428	.396	.460	.435	.457	.428
Three	.475	.488	.510	.563	.488	.450
Four	.483	.506	.921	.385	.513	.467
Five or more	.481	.384	.771	.410	.540	.488
35-44						
Up						
None	.199	.195	.318	.137	.237	.279
One	.172	.201	.245	.403	.228	.238
Two	.198	.203	.304	.170	.231	.244
Three	.182	.204	.145	.181	.239	.232
Four	.177	.226	.186	.340	.213	.226
Five or more	.176	.210	.192	.211	.189	.216
Down						
None	.571	.438	.480	.415	.509	.398
One	.602	.497	.445	.381	.529	.430
Two	.488	.578	.499	.332	.467	.435
Three	.455	.515	.343	.482	.479	.447
Four	.476	.461	.284	.472	.506	.465
Five or more	.524	.420	.459	.508	.563	.472

Table 5.11. Mean Relative Mobility for Women 25 to 34 Years Old by Number of Related Children Under 6 Years Old in the Household and Direction of Mobility

Direction of Mobility and Children Under 6	Mexican	Puerto Rican	Cuban	Indian	Black	White
Up						
None	.200	.190	.209	.230	.222	.263
One	.182	.218	.221	.197	.210	.253
Two	.182	.145	.150	.149	.206	.243
Three or more	.171	.189	.090	.107	.191	.227
Down						
None	.417	.407	.471	.441	.469	.409
One	.500	.497	.408	.502	.463	.421
Two	.434	.349	.593	.331	.467	.436
Three or more	.475	.559	.645	.503	.481	.445

However, there is a slight but noticeable tendency for Puerto Rican and Cuban mothers with only one preschool child to move further upward than childless Puerto Rican and Cuban women. For Cuban and Indian mothers, the presence of as many as two or three young children drastically reduces their upward movement. Downward descent is greater with the presence of each additional young child at home, although for Mexican, Puerto Rican and Indian women, the presence of one child seems to precipitate the longest drops downward.

GAINS FROM MOBILITY

One way of evaluating the net results of occupational mobility is to examine changes in the occupational structure, particularly changes in the distribution of occupationally mobile workers. As a means of summarizing the net results of occupational mobility, occupational origins and destinations of movers are compared to ascertain (1) whether each of the groups of occupationally mobile workers has gained or lost and (2) whether minority movers gain as much as majority movers as a consequence of their mobility. Basic changes in the total occupational structure have involved shifts away from farm and blue collar occupations toward white collar jobs. This leads to the expectation that occupational mobility follows the same general pattern.

In most general terms, occupationally mobile workers fit this expectation (Tables 5.12-5.14). Occupational movers, however, show a tendency to depart from sales and move into craft occupations more frequently than the general movement toward white-collar jobs would suggest. Among both male and female movers, Indian men were the only ones to show a heavier concentration in sales jobs in 1970 than in 1965, and all movers manifest increases in craft occupations. All groups of movers show a decline in farm occupations, and, with the exception of Cuban men, also in laborer jobs. Clerical jobs were popular destinations for both men and women, and gains are shown in most cases for professional and managerial positions. On the basis of the socioeconomic ranking of occupations (as discussed in Chapter 4), the broad conclusion is that occupational mobility has resulted in improved occupational standing for both minority and white movers.

Mexican men and women who moved between major occupation groups clearly show a pattern of gain in occupational status. Both men and women shifted away from lower-ranking occupations (laborer, farmer and farm laborer) into higher-ranking occupations (professional, managerial, clerical and crafts). Mexican women also departed from private household service work. The overall degree of gain from mobility is reflected by the index

Table 5.12. Origin and Destination Occupations of Mobile Men, 1965 and 1970

Occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
1965						
All	100.0	100.0	100.0	100.0	100.0	100.0
Professional	3.0	2.4	7.4	4.9	3.5	8.0
Managerial	4.1	4.4	12.2	4.0	2.7	11.6
Sales	3.6	4.3	6.7	2.3	2.5	9.4
Clerical	4.8	9.3	11.8	4.5	6.7	8.4
Crafts	13.5	13.2	13.3	17.5	11.3	16.8
Operatives	17.8	26.5	17.7	17.9	17.2	16.2
Transp. eq.	7.5	5.7	7.3	6.0	9.8	6.8
Laborer	18.0	12.0	6.7	22.3	21.6	10.3
Farmer	2.4	1.5	1.9	4.3	3.8	3.5
Farm laborer	15.6	6.3	3.1	8.9	5.8	2.5
Service	9.6	14.4	11.8	7.2	14.5	6.5
Priv. household	.1	---	.1	.2	.6	---
1970						
All	100.0	100.0	100.0	100.0	100.0	100.0
Professional	3.3	3.3	7.3	6.4	3.9	9.5
Managerial	5.3	6.3	11.6	6.9	4.7	16.8
Sales	3.6	3.8	5.7	3.0	2.3	8.5
Clerical	6.2	12.9	12.7	5.3	7.8	8.8
Crafts	21.2	15.7	15.7	19.9	17.8	20.5
Operatives	21.4	23.8	21.2	18.9	20.6	12.8
Transp. eq.	8.4	9.2	5.5	7.2	11.1	6.4
Laborer	15.3	10.4	6.9	13.8	15.5	6.6
Farmer	.7	---	.2	1.2	.6	1.5
Farm laborer	4.5	1.4	.5	5.0	2.9	1.6
Service	10.0	13.2	12.6	12.4	12.7	7.0
Priv. household	.1	---	---	---	.3	---

Table 5.13. Origin and Destination Occupations of Mobile Women, 1965 and 1970

Occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
		1965				
All	100.0	100.0	100.0	100.0	100.0	100.0
Professional	5.5	9.9	12.9	9.0	7.6	10.3
Managerial	4.0	4.8	2.8	5.8	2.1	8.6
Sales	10.7	8.9	12.9	6.1	5.0	14.3
Clerical	14.4	19.1	19.9	15.8	10.8	24.7
Crafts	3.3	5.4	4.4	2.9	2.4	3.3
Operatives	21.6	28.0	32.2	18.4	15.1	12.9
Transp.eq.	.4	.3	---	.6	.5	.6
Laborer	4.6	5.1	3.2	2.6	3.1	2.6
Farmer	.8	.7	---	3.2	1.7	1.4
Farm laborer	9.5	3.8	.3	2.3	4.5	.9
Service	19.4	13.3	9.8	26.8	25.8	18.6
Priv. household	5.8	.7	1.6	6.4	21.4	1.8
		1970				
All	100.0	100.0	100.0	100.0	100.0	100.0
Professional	6.6	7.9	11.7	10.5	8.0	12.3
Managerial	4.5	6.5	4.4	5.5	3.4	9.9
Sales	6.3	5.8	6.6	5.8	3.8	11.0
Clerical	21.4	29.0	27.8	20.1	19.1	28.5
Crafts	5.5	6.1	7.2	3.8	2.7	4.1
Operatives	23.1	22.9	24.9	16.9	19.3	12.5
Transp. eq.	.3	.7	1.3	.3	.7	.8
Laborer	3.4	3.1	1.0	2.0	3.0	2.0
Farmer	.3	.3	---	.6	.2	.3
Farm laborer	4.4	1.7	.6	3.8	2.2	1.4
Service	19.5	16.0	13.9	24.5	26.5	14.8
Priv. household	4.6	---	.6	6.1	11.2	2.4

Table 5.14. Differences Between Origin and Destination Occupations for Mobile Workers, by Sex, 1965-70

Sex and occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Professional	.3	.9	-.1	1.5	.4	1.5
Managerial	1.2	1.9	-.6	2.9	2.0	5.2
Sales	---	-.5	-1.0	.7	-.2	-.9
Clerical	1.4	3.6	.9	.8	1.1	.4
Crafts	7.7	2.5	2.4	2.4	6.5	3.7
Operatives	3.6	-2.7	3.5	1.0	3.4	-3.4
Transp. eq.	.9	3.5	-1.8	1.2	1.3	-.4
Laborer	-2.7	-1.6	.2	-8.5	-6.1	-3.7
Farmer	-1.7	-1.5	-1.7	-3.1	-3.2	-2.0
Farm laborer	-11.1	-4.9	-2.6	-3.9	-2.9	-.9
Service	.4	-1.2	.8	5.2	-1.8	.5
Priv. household	---	---	-.1	-.2	-.3	---
Dissimilarity:	.155	.124	.078	.157	.146	.113
Female						
Professional	1.1	-2.0	-1.2	1.5	.4	2.0
Managerial	.5	1.7	1.6	-.3	1.3	1.3
Sales	-4.4	-3.1	-6.3	-.3	-1.2	-3.3
Clerical	7.0	9.9	7.9	4.3	8.3	3.8
Crafts	2.2	.7	2.8	.9	.3	.8
Operatives	1.5	-5.1	-7.3	-1.5	4.2	-.4
Transp. eq.	-.1	.4	1.3	-.3	.2	.2
Laborer	-1.2	-2.0	-2.2	-.6	-.1	-.6
Farmer	-.5	-.4	---	-2.6	-1.5	-1.1
Farm laborer	-5.1	-2.1	.3	1.5	-2.3	.5
Service	.1	2.7	4.1	-2.3	.7	-3.8
Priv. household	-1.2	-.7	-1.0	-.3	-10.2	.6
Dissimilarity:	.124	.154	.180	.082	.154	.092

of dissimilarity (Table 5.14), which in this case shows the amount of change in occupational distributions between 1965 and 1970 as a result of occupational mobility. The occupational distributions for Mexican men changed by about 16%, and must be interpreted as mostly upward. For Mexican women the "gain" was about 12%.

Puerto Rican movers also generally gained as a result of mobility, but, in contrast with Mexican men and women, Puerto Ricans declined in professional occupations. The numbers of Puerto Rican men and women decreased in the semi-skilled operative category as well. Consequently, their overall changes in occupational distributions, of about 12% for men and 16% for women, can not be interpreted quite so easily as "gains". Nevertheless, the net result of Puerto Rican mobility appears to be an improvement in their occupational status.

The mobility of Cuban men resulted in relatively little change from their 1965 occupations (D=.08). In addition to declines in farm occupations, Cuban male movers show declines also in professional, managerial and sales occupations. However, their mobility did result in increases in crafts and operatives occupations, and also in a slight increase in laborer jobs. As a net result, the occupational mobility of Cuban men produces far less upward movement than occurs for Mexican and Puerto Rican men.

Cuban women fare somewhat better than Cuban men in their mobility, with gains from mobility in managerial, clerical, crafts and service occupations. However, Cuban women also lost through mobility in professional, sales, operatives and laboring jobs. The net shift in occupations for Cuban women of 18% therefore represents a mixture of gains and losses.

Occupationally mobile Indian men manifest one of the most clear patterns of gains in occupational status. The overall shift from 1965 to 1970 of 16% resulted from gains in all white-collar occupations as well as in crafts, operatives and service occupations and movement out of laborer and farm-related work. Mobile Indian women did not change their occupational distribution as much; only an 8% difference for the five-year period. Their gains also were rather mixed, with increases being confined to professional, clerical and crafts occupations.

Black mobile workers generally gained through mobility. For black men the shift is clearly away from the lower status occupations--farming and laborers--toward operatives, crafts and white-collar jobs. Black women show a very similar pattern, but also a distinctly strong movement away from private household service occupations where they have been traditionally over-represented.

Answers to the second question of whether minority movers gained as much as majority movers are not entirely simple and clear-cut. At the white-collar level, Spanish origin, Indian and black movers accomplish gains in about the same occupational areas as white movers. With the exception of Cuban men, all occupationally mobile men accomplish increases in professional, managerial, clerical and crafts occupations. Still, as of 1970, mobile white men were more heavily concentrated in professional and managerial occupations than any of the mobile minority men. Mobile white men were also more predominant than minority men at craft destinations, with the exception of mobile Indian men. As a general result, mobile minority men were more prevalent than white men in the lower-ranking destinations of laborers.

Mobile minority women were also less successful than white women in achieving professional and managerial destinations, and more often reached operative and laborer destinations. Black women, who reveal a sharp departure from private household service jobs (about 50%), also wind up at the end of this five-year period with a comparatively heavy proportion(11%) in this traditionally low-status occupation.

The redistribution of occupationally mobile minority workers in a generally upward direction can be viewed broadly as gains resulting from mobility. However, despite such gains from mobility, mobile minority workers appear less often than whites to be as heavily concentrated in the more prestigious destination occupations.

Traditional differences in occupational distributions of men and women are perpetuated by the destination patterns of mobile workers. As custom would dictate, mobile women are more heavily concentrated in professional, sales, clerical and service occupations, whereas men move more frequently than women into managerial, craft, operative and farm occupations. Part of the apparent advantage of women over men in moving into professional occupations can be explained by the moves of women into teaching and nursing, or generally into lower-ranking jobs in the professional category. Interestingly, both men and women show pronounced tendencies to move into semi-skilled operative occupations, and, in contrast with earlier generations, this represents a substantial change for women. Thus, although the patterns of sex differences seem to be generally in line with traditional patterns, there are at least isolated clues that conventional patterns are beginning to change.

As a further indication of the lesser success of minorities than whites in occupational mobility, it appears that Spanish origin, Indian and black mobile men gain less through upward, and lose more through downward mobility than comparable whites. Since young men are the most frequent movers, attention is centered on this group with controls for the origin occupation (Table 5.15). For each of the occupation origins (1965), upwardly mobile young minority men tend to move shorter distances than whites. Exceptions to this pattern occur for Mexican men moving

Table 5.15. Mean Relative Mobility Scores for Mobile Men Under 35 Years of Age, by Color, Origin, Occupation in 1965, and Direction of Mobility

Direction and occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
Up	.213	.209	.263	.240	.237	.281
Professional	.474	---	---	---	.416	.418
Managerial	.203	---	.326	---	.243	.273
Sales	.313	.296	.392	---	.288	.348
Clerical	.269	.316	.356	.350	.264	.359
Crafts	.182	.187	.234	.178	.171	.231
Operatives	.201	.180	.284	.231	.190	.244
Transp. eq.	.137	.158	---	---	.154	.201
Laborer	.179	.213	.177	.188	.164	.252
Farmer	.175	---	---	---	.113	.218
Farm laborer	.236	.234	.194	.255	.229	.280
Service*	.270	.207	.304	.218	.250	.325
Down	.345	.352	.379	.359	.289	.340
Professional	.429	.389	.355	.326	.361	.298
Managerial	.436	.440	.447	---	.452	.341
Sales	.419	.480	.451	---	.442	.385
Clerical	.340	.352	.350	---	.319	.288
Crafts	.301	.337	.347	.365	.318	.270
Operatives	.273	.259	.277	.308	.264	.244
Transp. eq.	.331	.303	.304	.256	.308	.277
Laborer	.280	.386	---	.308	.278	.247
Farmer	.467	.468	---	---	.387	.463
Farm laborer	.379	.120	---	---	---	.308
Service*	.387	.423	---	.371	.351	.324

*Excluding private household service workers upward from a professional origin and for Cubans whose origin was in managerial, sales, craft and operative occupations. Offsetting these exceptions for minority men is the fact that almost invariably they descend further than whites from each occupational origin.

Observed and Expected Destinations

The disadvantaged mobility thesis holds that inferior occupational achievements of minorities are a result of disadvantaged mobility rather than of impoverished origins. Occupational achievements of nonwhite men in the United States have been consistent with this thesis (Duncan, 1968; Hauser and Featherman, 1974a and 1974b). The generality of this proposition can be examined with the present data, and the immediate aim is to determine what happens to the destination occupational distributions of Spanish, Indian and black men and women, if they have (a) the same mobility opportunities as whites, and, alternatively, (b) the same occupational origins as whites.

Two sets of expected destination distributions were calculated, separately for men and for women, in order to examine the effects of mobility and occupational origin. First, under the assumption that minorities move exactly as whites, mobility matrices for whites were multiplied by the 1965 occupation distributions for each of the minority groups of mobile workers. Differences between observed white and these expected distributions are entirely the result of differences in the 1965 occupational distributions, since minorities are provided with the same mobility pattern as whites. Secondly, assuming that minorities have the same occupational origins as whites, the 1965 occupational distribution of white movers was multiplied by the actual mobility matrix for each of the minorities. Given these conditions, differences between observed white and minority expected destination distributions are solely a function of the actual mobility of minorities because their occupational origins are the same as for whites.

Almost without exception the results demonstrate that mobility has a greater influence in determining the destinations of minorities than their occupational patterns in 1965 (Table 5.16). The index of dissimilarity measures differences between (a) observed occupational destination distributions of white and minority movers and (b) observed white destinations and expected minority destinations under the alternative assumptions of equal mobility and equal origins.

Expected occupational destinations of Mexican men illustrate the general pattern. As shown in column (1) of Table 5.16, 31% of Mexican men would need to move to a different occupational category in order to

Table 5.16. Actual and Expected Destination Dissimilarities Between White and Minority Movers, by Sex

	Dissimilarities		
	(1)	(2)	(3)
		Expected	
Sex and minority	Observed	Equal mobility	Equal origin
Male			
Mexican	.31	.22	.08
Puerto Rican	.34	.25	.12
Cuban	.18	.10	.11
Indian	.23	.18	.07
Black	.36	.37	.10
Female			
Mexican	.30	.26	.05
Puerto Rican	.34	.30	.04
Cuban	.30	.26	.07
Indian	.23	.20	.05
Black	.36	.31	.05

attain a destination distribution equivalent to that for white men. In column (2), under the assumption of equal mobility, the index value is reduced to .22, suggesting that differences in origin fail to account for much of the destination difference. However, in column (3) the index is only .08, a clear indication that the effects of mobility are greater than those of origin. In general, Mexican men need improved chances for upward occupational mobility more than they need an improved occupational origin in order to reach occupations more nearly like those of white men. Their mobility during the late 1960's left them underrepresented in white-collar and craft occupations.

The predicted effects of mobility patterns are about the same for Puerto Rican and Indian men who changed occupations between 1965 and 1970 as for Mexican men, whereas for Cubans and blacks the results differ slightly. For mobile Cuban men, their origins and mobility pattern are about equally effective in determining their occupational destinations, an exception to the overall pattern of results. The occupational origins of black men appear to have almost no effect insofar as their destinations differ from whites (compare columns (2) and (3) of Table 5.16). As with most minority men, the mobility of black men explains more of their occupational achievement than does their disadvantaged origin.

Minority women move less frequently than white women into white-collar jobs, and, totally consistent with the disadvantaged mobility thesis, this is attributable to the mobility patterns of minority women rather than to their occupations in 1965 (Table 5.14). About a third of Spanish origin and black women would need to move primarily into white-collar occupations to accomplish the same destination distribution as white women. The effects of origin differences between minority and white women are of relatively little consequence, whereas, when the effects of mobility are isolated, destination differences almost disappear. The occupational destinations of Indian women differ from those for white women less than for the other groups of women, but the effects of mobility are just as apparent.

SUMMARY

The culmination in 1970 of all the dynamics of the occupational structure and all the determinants of mobility produced changes in the kinds of occupations and levels of achievement for occupationally mobile workers. Mexican, Indian and black movers appear to have benefited because of their upward movement, but it is less clear that Puerto Ricans and Cubans gained in occupational status as a result of their mobility. In comparison with gains in occupational status of mobile white workers, minorities accomplished an uncertain and questionable improvement. However, as the preceding discussion has amply demonstrated, simple and sweeping generalizations about occupational mobility require considerable qualification.

The dynamics of the occupational system involve not only the frequencies of occupational mobility, but mobility attributable to changes in the occupational structure itself, varying degrees of efficiency in movements between occupational categories and differences in the direction and distance of movement. In general, a third to a half of all workers employed in 1965 were in different occupations by 1970. Young workers were typically more mobile than older workers and men more mobile than women. Cuban men were the most mobile and black men the least. All Spanish origin men were more mobile than white men, but white women were more mobile than Puerto Rican and black women, while Indians were the most mobile of all women.

Cuban women were forced to move to another occupation as a result of changes in the occupational structure more often than other occupationally mobile workers. Cuban men, however, experienced the least impact of forced mobility. Compared with white men and women and Indian women, Mexican and Indian men, along with black women, experienced the negative impact of forced mobility to a relatively high degree. When examined in detail, forced mobility was not invariably more favorable to either men or women.

A majority of occupationally mobile men, but not women, moved upward in the occupational structure between 1965 and 1970. White men were more likely than minority men to be upwardly mobile, although Mexican, Indian and black men were almost as much upwardly mobile as whites. Among women, only Puerto Ricans were less likely to move up the occupation scale than white women. Differences in the incidence of upward mobility were generally greater between men and women than among the minorities or between minorities and whites.

Among upwardly mobile workers, white men moved longer distances upward than any group of minority men; Mexican and Puerto Rican men moved upwards only about three-fourths as far as white men. Black women advanced upward further than other women but not appreciably further than white and Cuban women. Men typically moved longer distances upward than women.

Whereas upwardly mobile workers moved about a fourth of the distance toward the top of the occupational hierarchy, downwardly mobile workers descended as much as a third to nearly half of the distance toward the lowest rungs on the occupational ladder. Among downwardly mobile men, Cuban men lost the most and blacks the least. Mexican, Cuban and white women dropped about halfway toward the bottom, further than for other women, and women descended further than men when they were losing status.

As an indicator of preparation for occupational achievement, increases in education served as a stimulant to upward mobility and helped to deter downward mobility. Intergroup gaps in direction and distances of occupational mobility were not altered convincingly or consistently at different levels of occupational attainment, but the importance of higher levels of educational attainment were nevertheless clear and strong. Not only did college graduates move longer distances upward than those with lesser education, but they also moved shorter distances downward. There was a mild indication that among high school graduates, white movers went further upward than Spanish origin, Indian and black movers.

The benefits of higher education were less in evidence for mobile women than for men. The distances upward tended to be less for women at most levels of educational attainment, with downward descent also greater than for men. Moreover, education was a less effective deterrent to downward descent for women.

As a determinant of occupational mobility, citizenship status appeared to have an influence, but native born movers did not consistently move longer distances than naturalized or alien workers. For groups such as Mexican men, differences in nativity and citizenship had little effect on distances covered in occupational mobility.

Occupationally mobile women were handicapped by the presence of pre-school children at home, and the number of children ever born also tended to reduce their chances for upward and increase their chances for downward movement. Upwardly mobile childless women and mothers of only one child moved further upward and shorter distances downward than mothers of two or more children.

The net results of occupational mobility for levels of achievement were in line with general shifts in the occupational structure, i.e., movers tended to depart from lower-ranking (blue collar and farm) occupations for higher-ranking (white collar and skilled craft) destinations. Exceptions to this pattern occurred for workers whose occupation in 1965 was in the sales category and who moved disproportionately to other occupations.

On a "gain and loss" basis, Indian men gained the most through occupational mobility with an unequivocal shift from lower to higher ranking occupations. Mexican, black and white men and women also improved their occupational status through mobility. Puerto Ricans probably bettered their occupational standing, too, but not so clearly and convincingly as others. Cuban movers displayed the least certain gains from occupational mobility.

In comparison with white movers, gains in occupational status via mobility were less impressive for minorities. Spanish origin, Indian and black mobiles achieved gains in white collar and craft occupations, but minority movers were still less prevalent in these "favored" destination occupations than white movers.

Finally, differences in occupational destination between men and women perpetuated traditional differences in occupations of men and women. Mobile women tended to move toward professional, sales, clerical and service occupations, whereas men moved more often into managerial, craft, operative and farm occupations. The inferior occupational achievements of minorities are due more to thier mobility patterns than to their inferior occupational origins in 1965.

CHAPTER 6

GAPS IN EARNINGS

Status inequalities, reflected by differences between white and minority men's occupational achievement and mobility, reach perhaps their most dramatic demonstration in the area of earnings. Expressed in monetary units, inequalities may be clearly understood and easily appreciated in a society in which dollars are among the most important kinds of rewards. Earnings from employment constitute a logical and functional outcome of participating in the labor force in a specific job. Hence, prior status achievements and mobility are instrumental in determining the amount of earnings.

The chief concerns in this chpater are (a) whether various determinants of earnings affect the earnings of minority and majority workers in about the same way and (b) whether differences in earnings diminish or disappear among workers equally well qualified. Educational attainment and vocational training once more serve to help identify workers with similar levels of preparation, whereas such factors as marital status, citizenship, and, for women, the presence of children represent circumstances relevant to earnings but which do not directly involve questions of work skills. Occupation, industry, class of worker and weeks worked are all related to levels of earnings and tend to cut across questions of skill and preparation for achievement.

INEQUALITIES IN EARNINGS

Inequalities in earnings clearly favor white over minority men and all men over all women; white women indicate a similar though not as extreme advantage over minority women (Table 6.01). Average earnings for white men in 1969 ($7,369) were more than thirteen hundred dollars greater than for Cuban men ($6,025) whose level of earnings surpassed other minority men. Lowest average earnings are for black and Indian men (just over $5300), or a gap of about two thousand dollars in comparison with white men. Mexican and Puerto Rican men exceed median earnings of black and Indian men by only about four hundred dollars. On the other hand, Mexican and Indian men were slightly more likely than Puerto Rican and black men to have earned $10,000 or more in 1969. In fact, less than one in ten Puerto Rican and black men compared to more than one in three white men had earnings of $10,000 or more. Among women, the earnings gap between white and other women is comparatively small, ranging from about a thousand dollars between Mexican ($2,747) and white women ($3,831) to only about one hundred dollars between Puerto Rican ($3,720) and white women.

Table 6.01. **Earnings in 1969, by Sex**

Sex and earnings	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male	100.0	100.0	100.0	100.0	100.0	100.0
Under $1,000	7.3	6.9	5.8	10.7	8.7	3.6
$1,000-1,999	5.7	4.1	4.3	6.6	6.2	3.3
2,000-2,999	7.1	4.5	5.4	8.6	7.8	3.1
3,000-3,999	10.9	8.9	9.7	10.2	11.6	4.3
4,000-4,999	10.6	14.2	12.1	10.2	11.9	5.3
5,000-5,999	11.1	15.8	12.4	10.9	12.0	7.5
6,000-6,999	11.1	14.4	12.1	10.6	11.1	8.8
7,000-7,999	10.4	10.4	10.4	8.3	10.0	10.3
8,000-8,999	8.2	7.1	7.0	6.7	7.6	10.3
9,000-9,999	5.4	4.4	5.6	4.4	4.7	8.2
10,000-14,999	10.1	7.4	10.9	10.3	6.9	23.2
15,000-19,999	1.3	1.1	2.3	1.5	.9	6.4
20,000-24,999	.3	.3	1.0	.5	.2	2.4
25,000 and over	.5	.4	.9	.5	.3	3.3
Median	$5757	$5721	$6025	$5339	$5317	$7369
Female	100.0	100.0	100.0	100.0	100.0	100.0
Under 1,000	24.5	17.7	15.1	23.9	22.7	16.3
1,000-1,999	14.0	8.8	10.0	14.9	14.7	10.8
2,000-2,999	15.4	10.4	14.3	13.0	13.8	11.1
3,000-3,999	16.4	18.2	23.2	15.4	14.8	14.2
4,000-4,999	11.9	17.7	16.9	10.2	10.9	13.6
5,000-5,999	7.6	12.1	8.6	7.8	8.2	11.3
6,000-6,999	4.7	7.1	4.8	6.1	5.9	8.3
7,000-7,999	2.6	3.5	3.1	3.6	3.7	5.5
8,000-8,999	1.4	2.1	1.6	1.8	2.1	3.2
9,000-9,999	.6	1.0	.7	1.0	1.2	1.9
10,000-14,999	.9	1.3	1.2	2.1	1.7	3.1
15,000-19,999	.1	.1	.1	.1	.2	.4
20,000-24,999	.0	.0	.2	.1	.0	.1
25,000 and over	.1	.0	.2	.2	.1	.2
Median	$2747	$3720	$3500	$2862	$2913	$3831

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The index of dissimilarity suggests that about a fourth to a third of minority men would need to move upe the earnings scale in order to match the earnings distribution for white men; about 10% to 20% of minority women would need to do likewise to have a distribution similar to that for white women (Table 6.02).

Differences in the earnings of men and women are relatively large, with women invariably averaging much less than men. For example, while the median earnings of Mexican men are only 65% as much as those of white men, Mexican women average earnings only 57% the level of Mexican men and 37% the level of white men. Earnings of white women average only about half those of white men and 80% as high as the earnings of Mexican men. As the D-index implies (Table 6.02), a third to a half of the women would have to earn more to equal the earnings levels of their male counterparts.

AGE AND SEX DIFFERENCES

Variations by age in earnings for men follow much the same pattern as labor force participation rates--lower at teenage and older and highest during middle-adult years (Table 6.03). However, not all population groups reach their peak participation or earnings at the same age level. White men reach their maximum earnings ($9,760) in the 40 to 44 age range. The only other male population here to do similarly is the Puerto Rican ($6,413). Reaching their earnings peaks prior to age 40 are Mexican (35 to 39, $6,887), Cuban (30 to 34, $6,827), and black (35 to 39, $6,199) men. The average earnings of Indian men are bimodal in this respect (35 to 39, $6,202 and 45 to 49, $6,205).

As expected, age-specific earnings of white men are higher, in most cases notably so, than for minority men. Exceptions to this pattern are comparable earnings for Cuban men 14 to 19 and 20 to 24 and Puerto Rican men 65 to 69. The differential between the age-specific earnings of white and minority men are least at the youngest age level tending to increase through the middle-adult years.

For women, the situation is quite different than for men. First of all, there is little consistency in earnings patterns by age within each female population. What pattern there is does not necessarily suggest an overall peak earnings level for women. The pattern by age for Puerto Rican and Indian women is trimodal; with Indian women, peak earnings are more widely dispersed throughout the 14 to 69 age range. White and Mexican women portray a bimodal pattern. However, the bimodality for white contrasts with that for Mexican women, reaching its first peak at ages 25 to 29, then declining through the marriage and motherhood years, increasing again at about age 40, and reaching another peak at ages 50 to 54 ($4,218). For

Table 6.02. Dissimilarities in Earnings*

Comparison	Mexican	Puerto Rican	Cuban	Indian	Black	White
Minority-white:						
Male	.28	.33	.26	.32	.33	xxx
Female	.18	.10	.16	.15	.14	xxx
Sex	.40	.34	.42	.31	.32	.50

*Based on Table 6.01

Table 6.03. Median Earnings in 1969, By Sex and Age

Sex and Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
14-19	$1642	$1911	$2111	$1090	$1347	$2080
20-24	4064	4692	5283	3504	3872	5284
25-29	5986	5766	6726	5475	5696	7979
30-34	6620	6264	6827	5973	6022	9146
35-39	6887	6218	6525	6202	6199	9691
40-44	6722	6413	6471	6083	6009	9760
45-49	6508	6256	6019	6205	5944	9549
50-54	6074	6223	5673	5721	5539	8945
55-59	5397	5682	5208	5630	5180	8356
60-64	5163	5520	4863	5051	4704	7689
65-69	2940	5150	3937	2166	2581	5092
Female						
14-19	1005	1884	1714	916	1107	1648
20-24	2681	3675	3291	2336	2826	3660
25-29	3035	4007	3609	3285	3522	4208
30-34	3149	3686	3584	3091	3377	3662
35-39	3114	4090	3716	3048	3344	3675
40-44	3029	3900	3647	3289	3205	3928
45-49	3070	3934	3485	3160	3021	4174
50-54	2883	4166	3400	3160	2730	4218
55-59	2545	3500	3161	3036	2342	4207
60-64	2333	3333	3214	3375	1870	4098
65-69	1450	3125	1400	1958	1165	2330

Mexican women, peak earnings (about $3,100) are in two successive age intervals, 30 to 34 and 35 to 39. However, their peak figures are not substantially higher than for ages 25 to 29, 40 to 44, and 45 to 49. Finally, black and Cuban women tend toward unimodality--but not in the same age brackets. As with the first peak for white, Indian and Puerto Rican women, black females hit their highest median earnings figure ($3,522) at the relatively youthful ages 25 to 29; Cuban women do so at ages 35 to 39($3,716).

For the most part, age-specific median earnings for white women are similar to or exceed those for minority women, particularly after age 44. In comparison with men, the earnings advantage of white over other women is generally much smaller.

Since earnings tend to increase with age until about the middle-adult ages and then decline through the older years, it is instructive to examine differences among groups in their respective gains and losses in earnings from one age level to the next older age group. The chief concern here is to determine whether the increases (or decreases) from one age to the next are approximately the same for each population group. To accomplish this assessment, figures in Table 6.04 indicate the proportionate change over the previous (or younger) age group.

Results indicate that minority men--whose earnings are invariably lower than for white men--do not realize as great a relative increment in earnings with age increases as white men. White men's earnings tend to rise with age up to about age 45, whereas minority men's earnings increase with age only up to ages 35 to 40. Earnings rise rather sharply at the younger ages, and at ages 20 to 24 minority men have about as favorable a relative increase over those at ages 14 to 19 as white men. However, at ages 25 to 34 minority men fail to manifest as much increase in wages as whites in comparison with the next younger age groups. After about age 45, earnings decrease with each successive age level; the decreases for minority men are generally higher than for white men.

Among women the pattern of changes in earnings from one age to the next is less consistent except for the sharp rise in earnings among those ages 20 to 24. White women's earnings do not decrease with age until they reach their 60's. Minority women's earnings reveal an oscillating pattern with decreases occurring as early as the ages of 30 to 34, followed in some cases with increases at older ages. At about age 30, earnings of black women begin to decrease and continue to do so with increasing age.

In general, the earnings of minorities suffer in comparison with whites in both absolute and relative terms. The inferior earnings of minorities are undercut further by the fact that their earnings do not increase with age to the same extent or degree as for whites and that their earnings tend to decrease more than for whites during the ages of earnings decline.

Table 6.04. Relative Changes in Earnings By Age Groups[*]

Sex and age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
14-19	xxx	xxx	xxx	xxx	xxx	xxx
20-24	1.48	1.46	1.50	2.21	1.87	1.54
25-29	.47	.23	.27	.56	.47	.51
30-34	.10	.08	.02	.09	.06	.15
35-39	.04	-.01	-.04	.04	.03	.08
40-44	-.02	.03	-.01	-.02	-.03	.01
45-49	-.03	-.02	-.07	.02	-.01	-.02
50-54	-.07	.00	-.06	-.08	-.07	-.06
55-59	-.11	-.09	-.08	-.02	-.06	-.06
60-64	0.06	0.03	-.07	-.10	-.09	-.08
65-69	-.43	-.07	-.19	-.57	-.45	-.34
Female						
14-19	xxx	xxx	xxx	xxx	xxx	xxx
20-24	1.67	.64	.75	1.55	1.55	1.22
25-29	.13	.09	.10	.41	.25	.15
30-34	.04	-.08	-.01	.06	-.04	.13
35-39	-.01	.11	.04	-.01	-.01	.00
40-44	-.03	-.05	-.02	.08	-.04	.07
45-49	.01	.01	-.04	-.04	-.06	.06
50-54	-.06	.06	-.02	.00	-.10	.01
55-59	-.12	-.16	-.07	-.04	-.14	.00
60-64	-.08	-.05	.02	.11	-.20	-.02
65-69	-.38	-.06	-.56	-.42	-.38	-.43

[*] Based on data in Table 6.03.

Inequalities in earnings of minority men in comparison with white men tend to be relatively great during the middle-adult working ages (Table 6.05). Ratios of the earnings of minority men to the earnings of white men indicate that minority men do less unfavorably at the younger ages 20 to 29 than at ages 30 to 64. For example, at ages 20 to 24, earnings of Puerto Rican and Cuban men compare quite favorably with the earnings of young white men. However, at ages 40 to 59, the earnings of Puerto Rican and Cuban men are only about two-thirds those of white men. Inequalities between the earnings of minority and white women sketch a different pattern. From about ages 25 to 49, earnings of minority women compare more favorably with the earnings of white women than at younger or older ages. This may be partly attributable to greater part-time and part-year work by white women at these ages.

Women's earnings are not only lower than for men, they also drop precipitously lower during the marriage and motherhood ages (Table 6.06). The earnings of white women at ages 20 to 24 are 79% as high as for white men at these ages, but at ages 35 to 39 the earnings of white women are only 38% as high as white men. A similar pattern also obtains for minority women and men, although the specific figures vary. Among Mexican persons, women's earnings are 66% the level of their male counterparts at ages 20 to 24, but only 45% as high at ages 35 to 39.

EQUALLY PREPARED BUT UNEQUALLY PAID

A great deal of emphasis has been placed on and use made of education in comparing "equals" in this study. As a proxy for education, years of completed schooling is a useful though imperfect indicator of similar preparation for achievement in the labor market. Although its limitations should be borne in mind (e.g., no information on quality of schooling), its utility and value in a study of this type are unquestioned. As in earlier chapters, the analysis of earnings will benefit substantially from a relatively heavy emphasis on differences by years of completed schooling.

Education

The positive relationship between education and earnings is well-known and is evident in Table 6.07 for each population group. However, median earnings differ greatly among the population groups, even with years of completed schooling held constant. Among men, the earnings pattern clearly favors whites over minorities, while earnings of white women are neither highest nor lowest of the female populations at any of the educational levels shown.

Table 6.05. Ratios of Minority to White Median Earnings by Sex and Age[*]

Sex and age	Mexican	Puerto Rican	Cuban	Indian	Black
Male	.65	.78	.82	.72	.72
14-19	.79	.92	1.01	.52	.65
20-24	.77	.89	1.00	.66	.73
25-29	.75	.72	.84	.69	.71
30-34	.72	.68	.75	.65	.66
35-39	.71	.64	.67	.64	.64
40-44	.69	.66	.66	.62	.62
45-49	.68	.66	.63	.65	.62
50-54	.68	.70	.63	.64	.62
55-59	.76	.68	.62	.67	.62
60-64	.67	.72	.63	.67	.61
65-69	.58	1.01	.77	.42	.51
Female	.72	.97	.91	.75	.76
14-19	.61	1.14	1.04	,56	,67
20-24	.73	1.00	.90	.64	.77
25-29	.72	.95	.86	.78	.84
30-34	.86	1.01	.98	.84	.92
35-39	.85	1.11	1.01	.83	.91
40-44	.77	.99	.93	.84	.82
45-49	.74	.94	.83	.76	.72
50-54	.68	.99	.81	.75	.65
55-59	.60	.83	.75	.72	.56
60-64	.57	.81	.78	.82	.46
65-69	.62	1.34	.60	.84	.50

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[*] Based on data in Table 6.03.

Table 6.06. Ratios of Female to Male Median Earnings by Age*

Age	Mexican	Puerto Rican	Cuban	Indian	Black	White
All	.57	.65	.58	.54	.55	.52
14-19	.61	.99	.81	.84	.82	.79
20-24	.66	.78	.62	.67	.73	.69
25-29	.51	.70	.54	.61	.62	.53
30-34	.48	.59	.52	.52	.56	.40
35-39	.45	.66	.57	.49	.54	.38
40-44	.45	.61	.56	.54	.53	.40
45-49	.47	.63	.58	.51	.51	.44
50-54	.48	.67	.60	.55	.49	.47
55-59	.47	.62	.61	.54	.45	.50
60-64	.45	.60	.66	.67	.40	.53
65-69	.49	.61	.36	.90	.45	.46

*Based on data in Table 6.03

Table 6.07. Median Earnings in 1969 of Persons, by Sex and Years of Completed Schooling

Sex and Years of Schooling	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
None	$3781	$4854	$3750	$2660	$3156	$5050
Elem., 1-7 years	4823	5057	4740	4018	4134	6022
Elem., 8	5964	5581	5318	4719	5025	7001
H.S., 1-3 years	6223	5748	5800	5173	5282	7706
H.S., 4	6715	6416	6139	5877	6022	8332
College, 1-3	7712	7173	7125	6785	7029	9302
College, 4	8666	9416	7326	8954	7958	12143
College, 5 or more	10919	13586	9478	9681	10415	13571
Female						
None	1578	3088	2700	1357	1301	2484
Elem., 1-7 years	2113	3425	3010	1676	1576	2986
Elem., 8	2566	3544	3262	2306	2081	3154
H.S., 1-3 years	2679	3437	3090	2467	2556	3296
H.S., 4	3333	4081	3650	3197	3425	3854
College, 1-3	3981	5026	4057	4208	4419	4267
College, 4	5514	6125	4055	6583	6394	5943
College, 5 or more	7458	7333	6147	8100	8319	8101

Generally highest after white men in median earnings by years of completed schooling up to one to three years of college are Mexican men; thereafter, Puerto Rican men come closest to the earnings level of white men (See also Table 6.08). Lowest in earnings for the most part are Indian men, although Cuban men are lowest among those with four years or more of college. In most of the education-specific categories, earnings of minority men tend to run 65-80% of similarly-educated white men.

Many people believe that the higher minority men ascend the educational ranks, the less significant their ascribed characteristics in the determination of their earnings. If true, one would expect their earnings to converge with the earnings of white men with increasing education. But as Table 6.08 suggests, this tends not to be the case. Although there is some indication of convergence for Indian men, it is a relative narrowing of the gap (e.g., only about 74% of the earnings level of whites for those with four years of college). Mexican, Cuban, and black men, in fact, indicate a sudden widening of the earnings gap at the College 4 level. This pattern then reverses for those with graduate work, but the numbers involved here are relatively few among minority men. In sum, increasing education does not necessarily reduce the earnings gap between white and minority men with similar years of schooling completed, and, where such a trend can be observed, a substantial earnings discrepancy nevertheless remains.

It is also possible to view the data in Table 6.07 in terms of which population group(s) seems to benefit most from increasing education. Table 6.09 provides earnings ratios by selected educational levels. In general, women gain the most, since with increasing education they participate at higher levels and more fully (i.e., more hours and weeks worked). But in relation to the various populations (controlling for sex) it is difficult to specify one or more of the populations which seems to benefit more than the others. Yet, in comparing within each population-sex group the ratio of earnings of (1) those with one to seven years of completed schooling to those with four years of high school, and (2) those with four years of high school to those with four years of college completed, it would appear that differentials in earnings gains are present. Among men, Indians seem to derive relatively more gain in earnings than most other men with increasing education, while Indian women share a similar distinction with black women. Mexican women also seem to experience disproportionately enhanced earnings with increasing education. The relative gains for the other populations do not on the whole appear to differ substantially, with the possible exception of the relatively lesser gains of Cuban men and women in the second comparison. However, it should be recalled in this context that conclusions about who gains most from educational increases are based here on cross-sectional data, whereas more firm conclusions on this question would require longitudinal data.

Table 6.08. Median Earnings of Mexican, Puerto Rican, Cuban, Indian, and Black Men Expressed as Percentage of White Median Earnings,[*] by Years of Completed Schooling[+]

Years of Completed schooling	Mexican	Puerto Rican	Cuban	Indian	Black
None	74.9	96.1	74.3	52.7	62.5
Elem., 1-7 years	80.1	84.0	78.7	66.7	68.7
Elem., 8	85.2	79.7	76.0	67.4	71.8
H.S., 1-3 years	80.8	74.6	75.3	67.1	68.5
H.S., 4	80.6	77.0	73.7	70.5	72.3
College, 1-3	82.9	77.1	76.6	72.9	75.6
College, 4	71.4	77.5	60.3	73.7	65.5
College, 5 or more	80.5	100.0	69.8	71.3	76.7

[*] White male earnings = 100.0

[+] Based on data in Table 6.07

An explanation for the substantially higher overall median earnings and by level of education of white compared to Spanish and Indian men in particular might be thought to lie in the differences in age structure. The Spanish and Indian populations in the U.S. tend to be much younger than the total predominatly white population. But as has been indicated (see Chapter 2), the Cuban population in the U.S. is actually several years older than the total and much older than the Mexican and Puerto Rican population(s). And since among Spanish, Indian, and black men with four years or more of college Cuban men have the lowest median earning, doubt is cast on the utility of age as a significant explanation of the white advantage in earnings.

To examine the age question further, median earnings by selected education levels and age are given for each sex in Tables 6.10 and 6.11. With these controls for age and education, white men average higher earnings in every instance. For men under forty years of age, the gap with white earnings is greatest for black and Indian men. After age 40, the differential is also largest for Indian and black men with relatively little formal schooling but also for Cuban men with high school or more education.

Overall, there is little or no variation in relation to the magnitude of earnings deficits of minority compared with white men and the age-education level. For example, median earnings of Indian and black men who are high school graduates consistently run about three-fourths that of white men with similar education regardless of age, while for Mexican and Puerto Rican men high school graduates the gap also remains fairly steady but at a higher level (lower earnings differential with whites). However, there is a decline (or higher differential) with increasing age for Cuban men with four years of high school completed.

For women (as for men) in each of the population groups, the increasing attainment of education appears to yield substantial earnings gains, particularly for those women who graduate from college (Table 6.09). The exception among women is found among Cubans; Cuban women with four years of college do not make appreciably more than those with four years of high school.

Although Cuban women who are high school graduates make about as much as other similarly-educated females, the differential between their average earnings and those of Mexican, Puerto Rican, Indian, black and white women increases sharply when the comparison is between Cuban and other female college graduates.

Among those women under fifty years of age, college educated white women tend to earn less or about the same as Mexican, Indian and black women but earn more than these same groups at that educational level among those ages 50 to 69. Of those who graduated from high school, Puerto Rican women lead other women in median earnings up to about age 50, after which white female high school graduates predominate.

Table 6.09. Degree of Median Earnings Gains in Relation to Years of Completed Schooling: Ratios by Selected Comparisons*

Sex and comparison	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Elem., 1-7 and H.S., 4	.72	.79	.77	.68	.69	.73
H.S., 4 and College, 4	.77	.68	.84	.66	.76	.69
Female						
Elem., 1-7 and H.S., 4	.63	.84	.83	.52	.46	.77
H.S., 4 and College, 4	.60	.67	.90	.49	.54	.65

[*] Ratios of median earnings at lower educational to earnings at higher educational level. Based on data in Table 6.07.

Table 6.10. Median Earnings in 1969 of Males, by Age and Selected Years of Completed Schooling

Age and years of schooling	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30						
Elem. 1-7	$3673	$4268	$3888	$3000	$2884	$4285
H.S. 4	5376	5546	5742	4760	4936	6504
College 4	6187	6700	7000	6100	6737	7867
30-39						
Elem. 1-7	5169	5495	5092	4468	4324	6469
H.S. 4	7872	7342	6756	6542	6820	9072
College 4	9722	---	8500	10000	8726	12840
40-49						
Elem. 1-7	5397	5522	4950	4785	4605	6698
H.S. 4	8283	7608	6560	7214	7139	9566
College 4	10000	11666	7555	12222	8875	14771
50-59						
Elem. 1-7	5120	5264	4661	3924	4393	6317
H.S. 4	7555	8250	5525	6625	6826	9105
College 4	10000	---	5250	11500	7727	14267
60-69						
Elem. 1-7	4442	4605	3900	3035	3539	5253
H.S. 4	5785	6500	4714	6000	5621	7848
College 4	---	---	6166	---	7187	12097

Table 6.11. Median Earnings in 1969 of Females, by Age and Selected Years of Completed Schooling

Age and years of schooling	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30						
Elem. 1-7	$1479	$2529	$2450	$1125	$1326	$2142
H.S. 4	2957	4059	3570	2607	3097	3495
College 4	4692	5375	4000	5625	5579	5229
30-39						
Elem. 1-7	2268	3750	3152	2000	1666	2963
H.S. 4	3843	4060	3734	3533	3717	3663
College 4	6233	---	4600	7333	6772	5678
40-49						
Elem. 1-7	2371	3603	3063	2062	1774	3172
H.S. 4	4073	4250	3750	4000	3848	4121
College 4	6250	---	3750	6750	7086	6263
50-59						
Elem. 1-7	2393	3700	3039	1562	1680	3193
H.S. 4	3738	4000	3595	3475	3610	4423
College 4	---	---	3944	6750	6935	7177
60-69						
Elem. 1-7	1700	2722	2357	1166	1187	2484
H.S. 4	2875	---	3000	5000	2738	4173
College 4	---	---	---	---	5928	6887

The lack of minority-white earnings convergence noted earlier in relation to education is still the case for Mexican, Puerto Rican and Cuban men when age is controlled (Table 6.12). However, there is some indication of a convergence for Indian men at each age level and for black men under thirty years of age. On the other hand, there is evidence for a divergence at the College 4 level in relation to the High School 4 level for Spanish origin,in particular Cuban men and for black men over thirty years of age.

Women compared to men at similar age and education levels for each population group generally earn much less. Moreover, the earnings range (and hence differentials) across educational levels among women is smaller than among men. White women are generally no more likely, and often less likely depending on age, than minority women to earn closest to the level of their similarly-educated male counterparts (Table 6.13). Most "successful" in this regard are black women with four years of college (78% to 90% of the level of black men) and young college educated Indian women. Nevertheless, it is interesting that after age 30, most working women who have graduated from college average lower earnings than males in their respective population groups whose education stopped at four years of high school.

The fact that inequalities in earnings between white and minority men fail to disappear when age and education are controlled carries a strong implication of discrimination against Spanish, Indian and black men. Since both age and educational attainment are known to have a strong relationship with earnings, in the absence of color-ethnic discrimination it might be expected that discrepancies in earnings would be much less when these two factors are controlled. Moreover, the kinds of jobs held by college graduates are normally more dependent on educational attainment than is the case for those with less than eight years of schooling. The results show, however, that the earnings of Mexican and Cuban college graduates are lower relative to comparable white men than the earnings of Mexican and Cuban men with lower levels of educational attainment. Only among Indian men and the younger blacks does the earnings gap tend to narrow for those with higher levels of educational attainment. Furthermore, at no age and educational levels do the earnings of these minority men match the average earnings of white men. To the extent that similar age and level of educational attainment constitute being "equally qualified," the lower average earnings of minority men is a consequence of discrimination, although this may be reflecting discrimination in such things as opportunity for equal quality education as well as direct discrimination in the labor market by employers.

Inequalities in earnings among women less clearly and less consistently imply discrimination. When the effects of age and education are controlled, the earnings of Puerto Rican and Cuban women tend to match and sometimes surpass the earnings of white women. At all ages, however, the average

Table 6.12. Ratios of Minority Male to White Male Earnings by Age and Education*

Age and education	Mexican	Puerto Rican	Cuban	Indian	Black
Under 30					
Elem. 1-7	.86	1.00	.91	.70	.67
H.S. 4	.83	.85	.88	.73	.76
College 4	.79	.85	.89	.78	.86
30-39					
Elem. 1-7	.80	.85	.79	.69	.67
H.S. 4	.87	.81	.74	.72	.75
College 4	.76	---	.66	.78	.68
40-49					
Elem. 1-7	.81	.82	.74	.71	.69
H.S. 4	.87	.80	.69	.75	.74
College 4	.68	.79	.51	.83	.60
50-59					
Elem. 1-7	.81	.83	.74	.62	.70
H.S. 4	.83	.81	.61	.73	.75
College 4	.70	---	.37	.81	.54
60-69					
Elem. 1-7	.85	.88	.74	.58	.67
H.S. 4	.74	.83	.60	.76	.72
College 4	---	---	.51	---	.59

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*Based on data in Table 6.10.

Table 6.13. Ratios of Female to Male Median Earnings, by Age and Education*

Age and education	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30						
Elem. 1-7	.40	.59	.63	.38	.46	.45
H.S. 4	.55	.73	.62	.55	.63	.54
College 4	.76	.80	.57	.92	.83	.66
30-39						
Elem. 1-7	.44	.68	.62	.45	.38	.46
H.S. 4	.49	.55	.55	.54	.54	.40
College 4	.64	---	.54	.73	.78	.44
40-49						
Elem. 1-7	.44	.65	.62	.43	.38	.47
H.S. 4	.49	.56	.57	.55	.54	.43
College 4	.62	---	.50	.55	.80	.42
50-59						
Elem. 1-7	.47	.70	.65	.40	.38	.50
H.S. 4	.50	.48	.65	.52	.53	.49
College 4	---	---	.75	.59	.90	.50
60-69						
Elem. 1-7	.38	.59	.60	.38	.34	.47
H.S. 4	.50	---	.64	.83	.49	.53
College 4	---	---	---	---	.82	.57

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*Based on data in Tables 6.10 and 6.11.

earnings of Mexican, Indian and black women at lower educational levels are substantially less than for white women. Among college graduates, the income gap tends to disappear, with the exception of Cuban women.

Vocational Training

Age. When earnings comparisons are restricted to those who have completed some form of vocational training, white men again show much higher earnings than Mexican, Puerto Rican, Cuban, Indian, and black men, regardless of age (Table 6.14). Among women with vocational training, white women dominate three of the five age categories (from 40 to 69) and tend to do as well or better than most of the other female populations in the two younger age categories. Exceeding earnings for white women are those for Puerto Rican women under 40 and Cuban women 30 to 39. Median earnings for women with vocational training range from a low of $2523 (black women ages 60 to 69) to a high of $4862 (white women ages 50 to 59).

Field of training. Tables 6.15 and 6.16 show median earnings for selected fields of vocational training as well as age for men and women. As noted earlier, crafts and trades account for the largest proportion of training for men who have had some form of vocational training; however, vocational training in health is also important, in particular for Indian, black and white men. Among women, business and office and health are the main types of vocational training.

White men with training in health tend to make more than white men with training in crafts and trades, with the differential increasing with age. However, this pattern is not consistently present among minority men. Finally, regardless of whether training was in crafts or health, white men's earnings exceed those of men in each of the minority populations here.

Differences in earnings of women with training in business and office versus those in health reveal no consistent pattern, although within age intervals, women, in particular minority women, with business training more often show earnings surpassing those for similar women with training in health. Of those in the business category, Indian women tend to earn least and Puerto Rican women up to age 49 and black women 40 to 69 the most. Among health-trained women, white women earn more in the under 30 and over 50 age brackets, but with Cuban women dominating in the interim age groups. Mexican and Indian women do least well in this respect. It should be noted here that training in a particular field does not necessarily result in employment in the same field.

Table 6.14. Median Earnings in 1969 of Persons With Vocational Training, by Sex and Age

Sex and age	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Under 30	$5476	$5619	$6195	$4683	$4922	$6923
30-39	8049	7679	7203	6732	6912	9753
40-49	8037	7516	7257	7260	6877	10100
50-59	7526	7375	6130	6357	6215	9323
60-69	5854	5950	5357	6357	4911	7951
Female						
Under 30	3099	3951	3500	2846	3244	3775
30-39	3959	4540	4180	3433	3980	4016
40-49	3851	4431	3836	3714	3956	4483
50-59	3666	3923	3480	3500	3596	4862
60-69	3250	---	3750	4166	2523	4499

Table 6.15. Median Earnings in 1969 of Males With Vocational Training, by Age and Selected Fields of Training

Age and field of training	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30	$5476	$5619	$6195	$4683	$4922	$6923
Crafts and trades	5855	6282	6500	4823	5165	7130
Health	6500	---	---	6500	5210	6535
30-39	8049	7679	7203	6732	6912	9753
Crafts and trades	8188	8196	6931	6861	7224	9714
Health	7714	---	---	8500	7800	10228
40-49	8037	7516	7257	7260	6877	10100
Crafts and trades	8106	8000	7227	7633	7185	9977
Health	8500	---	7700	6000	7400	11538
50-59	7526	7375	6130	6357	5215	9323
Crafts and trades	7758	7100	6000	6900	6651	9198
Health	---	---	---	---	6285	10821
60-69	5854	5950	5357	6357	4911	7951
Crafts and trades	6000	5571	4250	6666	5400	7878
Health	---	---	---	---	7166	10685

Table 6.16. Median Earnings in 1969 of Females With Vocational Training, by Age and Selected Fields of Training

Age and field of training	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30	$3099	$3951	$3500	$2846	$3244	$3775
Bus. and Office	3477	4362	3953	3343	3671	4125
Health	3166	4111	3000	3083	3424	4143
30-39	3959	4540	4180	3433	3980	4016
Bus. and Office	4653	5125	4400	4285	4703	4392
Health	4086	4500	5100	4416	4393	4143
40-49	3851	4431	3836	3714	3956	4483
Bus. and Office	4722	5083	4235	3875	5151	4834
Health	3736	4500	6300	4000	4476	4744
50-59	3666	3923	3480	3500	3596	4862
Bus. and Office	5272	5125	3750	---	5369	5275
Health	4071	---	4250	3400	4218	5291
60-69*	3250	---	3750	4166	2523	4499

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*Because of insufficient frequencies of employed Mexican, Puerto Rican, Cuban, and Indian women in this age group with training in either business and office or health, median earnings by those fields are not given.

Disability

Introduced in the census for the first time in 1970, the disability item is a self-perception item. Since perceptions of illness, disease and disability vary widely among individuals and groups in society, such an item is to some degree less reliable than those which have been more characteristic of the census in the past. Nevertheless, it is important to consider the influence of disability on earnings, particularly whether presence of disability "evens out" or enhances differences between population groups.

Expectedly, men and women claiming a work-limiting disability make less than those not claiming a disability (Table 6.17). Among those with a disability, highest earnings occur in the 35 to 49 age range. However, the various population groups do not appear to be equally affected in their relative earnings by disability. For example, black and white men in the prime working years, 35 to 49, with work-limiting disability make proportionately less than their same color peers without disabilities than is true for their Spanish and Indian counterparts. The percentage decline in earnings extends from a low of ten percent for Cuban to sixteen percent for Mexican men among the Spanish with seventeen percent for Indian men, but a twenty-one and twenty percent differential obtains for black and white men.

Nevertheless, holding disability status constant again reveals white men with highest earnings at each of the three age intervals. Among women, the pattern is less clear. Regardless of disability status, white women earn more than Mexican, Indian, and black women, but not always more than Puerto Rican and Cuban women. Also, the earnings of Mexican, Indian and black women 50 to 69 years of age with work-limiting disabilities appear to be hardest hit of the six female groups.

In sum, inequalities in average earnings between minorities and whites and between the sexes do not disappear among workers who are "equally well qualified" on the basis of educational attainment, vocational training and disability. In other words, the consistently lower levels of earnings of minority men cannot be attributed solely to their lack of educational attainment, vocational training or the presence of a disability. In every instance, earnings of minority men are less than earnings of "similar" white men. Moreover, the same conclusion is reached when average earnings of men and women are compared. Similarities in educational attainment, vocational training and disability status do not remove inequalities in earnings between the sexes. Among women themselves, however, differences in earnings neither consistently favor nor disfavor white in comparison with minority women.

Table 6.17. Median Earnings in 1969, By Sex, Age, and Disability Status*

Sex, age and disability status	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Under 35						
No Disability	$5183	$5390	$6297	$4806	$4928	$7391
Work-Limiting Disability	4405	4250	5500	3312	3764	5660
35-49						
No Disability	6811	6382	6432	6260	6164	9820
Work-Limiting Disability	5680	5396	5807	5194	4869	7863
50-69						
No Disability	5551	5850	5282	5663	5133	8423
Work-Limiting Disability	4531	5541	4821	4625	4084	6843
Female						
Under 35						
No Disability	2612	3568	3420	2540	3079	3556
Work-Limiting Disability	2311	2083	1125	2083	2160	2667
35-49						
No Disability	3112	4026	3662	3218	3280	3998
Work-Limiting Disability	2527	3541	3129	2750	2172	3024
50-69						
No Disability	2732	3846	3291	3158	2385	4178
Work-Limiting Disability	1681	3125	2937	1750	1401	2927

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*Does not include those with work-preventing disabilities

SIMILAR EMPLOYMENT CONDITIONS

Consistent with the principle of equality, workers in similar jobs and industries and those who work about the same amount of time should also receive similar earnings for their efforts. In view of the inequalities in earnings already discussed, differences in average earnings are not expected to disappear when various aspects of employment conditions are controlled. However, it is both important and informative to examine the degree to which this is the case as well as the effects of occupation, industry, class of worker and weeks worked on average earnings.

Occupation

Highest median earnings regardless of age and race or ethnicity occur for men in professional and managerial positions; generally lowest in earnings are those in laborer jobs (Table 6.18). Differences within major occupation groups by age reveal the usual curvilinear relation of earnings and age with the highest earnings in the 35 to 49 age range.

White men almost invariably have the highest median earnings and Indians and blacks most often the lowest within each occupation. For men 50 to 69, however, Cuban men are also frequently found to be notably disadvantaged in earnings. For example, median earnings for Cuban men at this age level in managerial jobs are $6928--almost five thousand dollars less than for similar white men but also about six hundred dollars less than for similar Puerto Rican, Mexican, and Indian men.

The relative magnitude of earnings differentials between white and minority men by age-occupation categories is given in Table 6.19, where earnings for Mexican, Puerto Rican, Cuban, Indian, and black men under 50 years of age are expressed as percentages of white male earnings. In few cases do the earnings of any of the minority population groups attain even the ninety percent level of the white, and such a level is found only among those under 35 years of age. Put another way, the earnings gap is narrower for those under 35 than among those 35 to 49, despite the fact that earnings increase for all population groups in the second age bracket for almost all occupations. One way of viewing such a finding is that inequality is more prevalent among those 35 to 49; the other side of the coin suggests that there may be less discrimination at the younger ages. However, the wider gap at the middle ages reflects, at least in part, the effects of uneven starting points in the occupational structure.

Highest median earnings for women, as for men, tend to be in professional and managerial but also in clerical work (Table 6.20). Lowest of the nonfarm

Table 6.18. Median Earnings in 1969 of Males, by Age and Major Nonfarm Occupation Group* in 1970

Age and occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 35						
Professional	$7266	$7346	$8272	$6666	$7023	$8959
Managerial	7369	7576	7958	6611	6780	9119
Sales	5372	5384	6227	3937	5416	7934
Clerical	5628	5301	5888	5208	5416	6675
Crafts	6258	6408	6979	5686	5440	7637
Operatives	5280	4911	5650	5023	5172	6452
Transport. Eq.	5460	5683	5333	4904	5090	6798
Laborer	2776	3125	2500	1603	1686	2914
Service*	4060	4810	4391	3950	4035	5844
35-49						
Professional	9900	9666	10174	8970	9394	13298
Managerial	8750	7333	8500	8750	8410	12848
Sales	7741	6821	7437	6833	6681	11087
Clerical	7775	6868	6500	7454	7380	8696
Crafts	7629	7122	6438	6962	6600	9379
Operatives	6854	5980	5887	6157	6248	8064
Transport. Eq.	6632	6125	6088	6105	5841	8366
Laborer	3723	3000	---	2631	2272	4380
Service*	5524	5566	4717	4565	5248	7579
50-69						
Professional	8884	9500	9333	6961	8091	12845
Managerial	7500	7666	6928	7500	7130	11858
Sales	6000	7250	6125	5375	5161	8909
Clerical	7217	6285	5272	7357	7085	8176
Crafts	6759	7210	5880	6590	5889	8446
Operatives	6373	5620	4822	5823	5886	7470
Transport Eq.	6166	5750	4583	5958	5263	7261
Laborer	2287	2250	4000	1880	1829	3149
Service*	4409	5068	4029	4160	4439	5753

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*Excludes men in private household work

Table 6.19. Median Earnings of Mexican, Puerto Rican, Cuban, Indian, and Black Men 14-49, Expressed as Percentage of White Dollar Earnings, by Age and Major (nonfarm) Occupation Group

Age and occupation	Mexican	Puerto Rican	Cuban	Indian	Black
Under 35					
Professional	81.1	82.0	92.3	74.4	78.4
Managerial	80.8	83.1	87.3	72.5	74.4
Sales	67.7	67.9	78.5	49.6	68.3
Clerical	84.3	79.4	88.2	78.0	81.1
Crafts	81.9	83.9	91.4	74.5	71.2
Operatives	81.8	76.1	87.6	77.9	80.2
Transport. Eq.	80.3	83.6	78.5	72.1	74.9
Laborer	95.3	100.7	85.8	55.0	57.9
Service	69.5	82.3	75.1	67.6	69.1
35-49					
Professional	74.5	72.7	76.5	67.5	70.6
Managerial	68.1	57.1	66.2	68.1	65.5
Sales	69.8	61.5	67.1	61.6	60.3
Clerical	89.4	79.0	74.8	85.7	84.9
Crafts	81.3	75.9	68.6	74.2	70.4
Operatives	85.0	74.2	73.0	76.4	77.5
Transport. Eq.	79.3	73.2	72.8	73.0	69.8
Laborer	85.0	68.5	---	60.1	51.9
Service	72.9	73.4	62.2	60.2	69.2

occupations in earnings is private household and laborer positions. It must be borne in mind that certain occupations are characterized more by part-time employment than others, and this is true more for women than for men. An example here would be sales. For men, the earnings differences between sales and clerical are relatively small, reflecting among other things the fact that men in both occupation groups tend to be full-time workers. But among women, those in clerical work tend to earn substantially more than women in sales. In any event, employed men in each of the populations earn more than women in similar occupations regardless of age.

Unlike the pattern for men, white women do not consistently earn more nor less than minority women. For example, among women under 35, Puerto Rican and Cuban women earn more than white women in clerical jobs where women in general are heavily concentrated. Also close behind white women in this occupation are black females. For those ages 35 to 49 in clerical work, both Indian and black women earn more than whites whose advantage over Puerto Rican, Mexican, and Cuban women in this occupational category is small. Even white women 35 to 49 who are professionals have a median earnings figure that exceeds only that for Mexican professional women.

Even when controlling simultaneously for age, ethnicity and occupation, men invariably average higher earnings than women. This pattern is sharply illustrated by the ratios of female to male earnings given in Table 6.21. While all women here earn well below the level of most men in specific occupation groups, white women earn surprisingly less than white men in comparison with minority men and women. Earnings of white women in any given major occupation group never exceed the 60% level of white men in the same group. Among minority women, Mexicans are most like whites in this respect. However, while women are disadvantaged in comparison with men within occupations, it is unlikely, based on these data, that white women are more discriminated against in earnings than minority women. Rather, it more likely represents at least in part generally less need of white women to work (and when they work to do so full-time) and to move less pressured in and out of the labor force. However, because the pattern for Mexican women differs from other minority women here, one should not rule out the possiblity that Mexican women may be more doubly disadvantaged by their sex and background than other minority women.

Industry

Among minority men, peak earnings are associated with public administration, professional services, and to a lesser extent, finance, insurance, and real estate; for white men, it is mainly the latter two of these industry categories (Table 6.22). Low earnings levels tend

Table 6.20. Median Earnings in 1969 of Females, by Age and Major Nonfarm Occupation Group in 1970

Age and occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 35						
Professional	$4521	$4576	$5000	$4625	$5640	$5332
Managerial	3538	3875	5750	5187	5174	4980
Sales	1801	1166	1428	1500	2329	1641
Clerical	3428	4142	4058	3351	3886	3941
Crafts	3352	3300	4125	2555	3742	3917
Operatives	2646	3250	3091	2267	3091	3226
Transport. Eq.	2125	750	1750	3500	3130	1880
Laborer	914	600	500	800	811	775
Service	1903	3125	2208	1759	2287	1938
Private Household	718	812	750	804	927	689
35-49						
Professional	5619	6375	6454	6250	6777	6154
Managerial	4166	7000	4666	4500	5285	5564
Sales	2605	3166	3071	2375	3199	2499
Clerical	4278	4362	4000	4625	4887	4451
Crafts	3826	3777	4187	5000	4200	4757
Operatives	3395	3926	3420	3264	3540	3977
Transport. Eq.	1625	6000	3500	1833	2843	2350
Laborer	1161	4000	2500	821	776	752
Service	2342	3638	3080	2602	2893	2364
Private Household	880	2666	2500	1090	1179	836
50-69						
Professional	5357	7500	7000	5642	6633	7191
Managerial	3555	7500	4500	4500	4600	5544
Sales	2200	3600	2833	2923	2905	2875
Clerical	4119	4583	3833	4777	4977	4896
Crafts	4333	4000	4333	4750	3833	4840
Operatives	3216	3670	3218	3086	3438	3953
Transport. Eq.	5500	0	4500	9000	3166	3089
Laborer	967	500	4000	708	724	778
Service	2133	2772	2352	3000	2705	2625
Private Household	915	1250	1750	1055	1070	983

Table 6.21. Ratios of Female to Male Earnings, by Age and Major Nonfarm Occupation*

Age and occupation	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 35						
Professional	.62	.62	.60	.69	.80	.60
Managerial	.48	.51	.72	.78	.76	.55
Sales	.34	.22	.23	.38	.43	.21
Clerical	.61	.78	.69	.64	.72	.59
Crafts	.54	.52	.59	.45	.69	.51
Operatives	.50	.66	.55	.45	.60	.50
Transport. Equip.	.39	.13	.33	.72	.61	.28
Laborer	.33	.19	.20	.50	.48	.27
Service	.47	.65	.50	.45	.57	.33
35-49						
Professional	.57	.66	.63	.70	.72	.46
Managerial	.48	.95	.55	.51	.63	.43
Sales	.34	.46	.41	.35	.48	.23
Clerical	.55	.64	.62	.62	.66	.51
Crafts	.50	.53	.65	.72	.64	.51
Operatives	.50	.66	.58	.53	.57	.49
Transport. Equip.	.25	.98	.57	.30	.49	.28
Laborer	.31	1.33	---	.31	.34	.17
Service	.42	.65	.65	.57	.55	.31
50-69						
Professional	.60	.79	.75	.81	.82	.56
Managerial	.47	.98	.65	.60	.65	.47
Sales	.37	.50	.46	.55	.56	.32
Clerical	.57	.73	.73	.65	.70	.60
Crafts	.64	.55	.74	.72	.65	.57
Operatives	.50	.65	.67	.53	.58	.53
Transport. Equip.	.89	---	.98	---	.60	.43
Laborer	.35	.22	1.00	.38	.40	.25
Service	.48	.55	.58	.72	.61	.46

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*Based on data in Tables 6.19 and 6.20

to be in agriculture and personal services. In no age-industry group does the median earnings figure for Mexican men exceed that for white men and only in the entertainment and recreation service group among men 14 to 34 do Puerto Rican men average more than white although less than Cuban men. Among those under thirty-five, professional services and public administration are the two categories in which Cuban men are on par with white men. However, from age 35 on, median earnings of white men surpass in each industry category those for each of the minority populations. The differentials are particularly acute during the prime working years, 35 to 49. Regardless of category, Spanish men tend to earn more than black men. However, the relationship between Indian and black men varies more by category. Among females, white women do not consistently average higher earnings than minority women in each of the age-industry categories (Table 6.23). Where less, their earnings tend to be intermediate between the highest and lowest earnings for each breakdown.

Class of Worker

Mexican, Puerto Rican, Cuban, and Indian men earn more on the average than black but much less than white men in private business and self-employment (Table 6.24). In federal government jobs, white men again predominate and are followed in order by Cuban and Mexican men. Compared to their earnings from federal government employment, Mexicans in state and local government positions do relatively less than the other male populations. Generally least well off are Indian followed by black men regardless of class of worker category. Cubans, on the other hand, do much better, ranking ahead of minority men in all categories; in one category, state government, their earnings surpass on the average those of white men.

Minority women who work in private business, federal government, and state government make less than white women in those same worker categories (Table 6.24). For Mexican, Indian, black and white women, peak earnings are found in the federal government group. Again, average earnings of women are lower than for men regardless of category.

Weeks Worked

With few exceptions, white men earn more than minority men in this study regardless of age and weeks worked in 1969 (Table 6.25). Among men in the prime working ages (30 to 59) who worked 50 - 52 weeks in 1969, white men averaged earnings fifty or more dollars higher a week than minority men. Black men earned less than other minority men working a full year. Differences between white and minority earnings tend to be

Table 6.23. Median Earnings in 1969 of Females, by Age and Industry

Age and industry	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 35						
Agr., forestry	$ 949	$ 600	$ 500	$ 900	$ 887	$1183
Mining	4166	3000	5500	4000	3666	4735
Construction	4000	2500	2750	3500	3450	4150
Manufacturing	3030	3412	3238	2825	3397	3865
Transportation, etc.	4083	4285	4555	4363	3884	4423
Wholesale, retail trade	2127	2764	2642	1697	2325	2280
Finance, insur., real estate	3693	4447	4150	3617	3775	4065
Business, repair serv.	2722	4250	3750	2800	2972	3545
Personal services	1343	2846	2125	900	1288	1800
Entertain., recreat. service	1333	3500	5000	1000	2000	2345
Professional services	2890	3921	4078	2886	3581	3960
Public administration	4156	4357	5000	4352	5055	4719
35-49						
Agr., forestry	1312	4000	2500	863	863	997
Mining	7000	---	3500	4000	3833	6058
Construction	4666	4000	3500	2500	3666	4813
Manufacturing	3750	3965	3534	3650	3837	4553
Transportation, etc.	4653	4500	5300	5166	4904	5378
Wholesale, retail trade	2794	3586	3264	2750	3021	2966
Finance, insur., real estate	4409	4400	4190	3800	3876	4715
Business, repair serv.	2500	6000	3625	5000	3169	3560
Personal services	1567	2785	3105	1518	1520	2180
Entertain., recreat. service	2800	4000	3166	5500	2814	3177
Professional services	3099	4461	5000	3557	4103	4082
Public administration	5913	5000	5500	5558	6203	5516
50-69						
Agr., forestry	1100	500	4000	866	795	1026
Mining	7500	---	---	---	4000	5879
Construction	6000	---	---	2500	3227	5207
Manufacturing	3680	3750	3273	3673	3859	4628
Transportation, etc.	4750	5000	8000	4000	3787	5848
Wholesale, retail trade	2441	3250	3130	2980	2780	3219
Finance, insur., real estate	3600	6000	4625	5500	3356	4982
Business, repair serv.	1875	750	2000	3000	3121	3801

Table 6.23. Continued

Age and industry	Mexican	Puerto Rican	Cuban	Indian	Black	White
Personal services	1397	2875	2176	1451	1256	1831
Entertain., recreat. service	3000	500	2333	750	2200	3141
Professional services	3075	5062	4888	3800	3774	4714
Public administration	5000	7333	8250	4857	6298	6139

Table 6.22. Median Earnings in 1969 of Males, by Age and Industry in 1970

Age and industry	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 35						
Agr., forestry	$2955	$3888	$3000	$2103	$1891	$4352
Mining	5972	3500	---	6562	5064	7468
Construction	5322	5294	6200	4697	4337	7285
Manufacturing	5841	5266	6377	5300	5316	7568
Transportation, etc.	6005	5972	7250	5666	5445	7808
Wholesale, Retail trade	4777	5034	5879	4290	4392	6611
Finance, Insur., real estate	6038	5633	6576	4125	5530	8186
Business, repair service	4596	5620	5833	5181	4803	6930
Personal services	3787	4900	4642	4111	3442	5733
Entertain., recreat. service	4500	6125	8125	2500	3892	5435
Professional services	4912	5729	7812	5032	4942	7778
Public administration	6564	5884	8000	5530	6318	7871
35-49						
Agr., forestry	3867	3583	4666	3269	2426	5931
Mining	7619	6500	10000	7230	6038	9217
Construction	6700	6583	6233	6147	5333	9520
Manufacturing	7561	6259	6329	6711	6500	9727
Transportation, etc.	7125	7000	6636	6500	6345	9830
Wholesale, retail trade	6431	6318	6153	6043	5449	9099
Finance, insur., real estate	7653	5619	6900	7333	5686	12292
Business, repair service	6216	5821	6125	6222	5608	9236
Personal services	5343	5650	4777	3812	4416	7607
Entertain., recreat. service	6428	4875	4750	3700	4671	8828
Professional services	6795	6178	9000	6177	6800	12168
Public administration	7871	8300	9000	7060	7937	9609
50-69						
Agr., forestry	2956	2500	3500	2338	1891	4328
Mining	7000	7000	---	6142	5630	8445
Construction	5232	7200	5400	5333	4571	7830
Manufacturing	6864	5948	5441	6203	6126	8734
Transportation, etc.	6606	6450	6050	6352	5686	8747
Wholesale, retail trade	5116	5392	4866	5404	4615	7766
Finance, insur., real estate	5142	5214	5833	6000	4718	9904
Business, repair serv.	4795	5000	5111	6000	4811	7101

Table 6.22. Continued

Age and industry	Mexican	Puerto Rican	Cuban	Indian	Black	White
Personal services	3797	5187	3730	3250	3264	5788
Entertain., recreat. service	4562	4500	4833	2000	4155	7100
Professional services	5100	5722	7350	5433	4946	9102
Public administration	7172	7687	6500	6552	7298	8952

Table 6.24. Median Earnings in 1969, by Sex and Class of Worker

Sex and class of worker	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Private Business	$5611	$5593	$5918	$5292	$5104	$8314
Federal Government	7384	6961	8500	6466	7092	9169
State Government	5859	6666	8800	5375	5240	8222
Local Government	5809	6454	6812	4805	6067	8265
Self-employed	5766	6571	6578	4517	4337	8446
Working without pay	882	---	---	631	801	883
Female						
Private Business	2697	3673	3436	2525	2496	3702
Federal Government	4709	4500	5000	4669	5419	5880
State Government	3458	4538	4800	3343	4121	4917
Local Governement	3047	3976	5750	3295	4572	4960
Self-employed	1892	3272	2227	2250	2340	2722
Working without pay	628	---	571	562	639	544

smallest in the youngest age group (under 30). Closest to white men in this age group for most weeks worked categories are Cuban men.

At given age and weeks worked levels, earnings of Puerto Rican, Cuban, and white women tend to outdistance those of Mexican, Indian, and black women, but not invariably (Table 6.26). While some of these differences in earnings among women may be due to differences in such factors as education and average hours worked per week, it is possible also that the relative "success" of Puerto Rican women may relate to their concentration in New York, a city where wages and salaries are higher than the national average. As with men, earnings of black women over age 30 who worked a full year in 1969 are lowest among these minority women. For women under 30, Mexican and Indian women had least favorable full-year earnings; black women join Mexican women for those 30 to 69 in occupying an unfavorable earnings position.

Besides differences in earnings among persons who have worked similar numbers of weeks, an additional important question relates to whether full-year work reduces the earnings gap between white and minority men. Based on the data in Table 6.25, there appears to be little support for such an assertion. In fact, among men under 30 years of age, the increase in weeks worked tends to leave minority men relatively worse off compared to white men. However, differences in relative earnings by weeks worked are for the most part small and not consistently unidirectional. For example, the relative standing of Mexican in relation to white men ages 30 to 49 is virtually the same for those working 40 to 47 and 50 to 52 weeks. The same can also be said of black men ages 30 to 39 and Indian men ages 40 to 49, while for Cuban men ages 30 to 59 the relative gap decreases.

Median earnings by hours worked were also examined in each population group (data not shown). Perhaps because of the fact that hours worked are based on the week preceding the census while earnings as well as weeks worked are based on the preceding year (i.e., 1969), no consistent pattern other than generally higher earnings for white men was evident.

With rare exception, disparities in earnings between minorities and whites remain for those in similar occupations and industries and for those who worked about the same number of weeks in 1969. Similar, although not necessarily identical, conditions of work do not therefore remove disparities in earnings. Evidently, it is not yet sufficient for Spanish origin, Indian and black men to achieve occupational levels similar to those of white men, nor to be employed in the same industries. Neither does it seem to make a great difference whether minority men work a part-year or full-year. Their earnings are typically lower under each of these conditions. Once again, the same kind of conclusion is unavoidable regarding sex differences in earnings. Women in the same occupation, industry, or class of worker groups as men or who work a full year obtain lower earnings.

Table 6.25 Median Earnings in 1969 of Males, by Age and Weeks Worked in 1969

Age and weeks worked	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30						
13 weeks or less	$ 731	$1050	$ 937	$ 696	$ 780	$ 866
14-26 weeks	1666	1890	2500	1704	1659	2124
27-39 weeks	2845	3263	2850	2729	2665	3490
40-47 weeks	4208	4882	5111	4458	4133	5271
48-49 weeks	4907	5400	5428	4483	4803	6246
50-52 weeks	5785	5712	6675	5748	5412	7450
30-39						
13 weeks or less	975	928	966	812	831	1170
14-26 weeks	2750	2500	2250	2342	2685	3602
27-39 weeks	3843	3789	4000	3625	3787	5952
40-47 weeks	5735	5568	5550	5145	5364	7879
48-49 weeks	6563	6016	6545	5041	6180	9071
50-52 weeks	7213	6657	7348	6884	6502	9707
40-49						
13 weeks or less	914	---	1000	812	925	1210
14-26 weeks	2471	1750	2583	2318	2459	3514
27-39 weeks	3712	4062	3388	3500	3635	6036
40-47 weeks	5827	5760	5269	5593	5283	8110
48-49 weeks	6783	6380	5461	6000	6129	9480
50-52 weeks	7132	6740	7110	6854	6435	9973
50-59						
13 weeks or less	869	---	---	1222	763	1210
14-26 weeks	2184	---	2166	2000	2166	3324
27-39 weeks	3312	3500	3500	2700	3332	5490
40-47 weeks	4765	5142	4466	5678	4883	7453
48-49 weeks	5333	6000	5333	6888	5623	8554
50-52 weeks	6402	6375	6130	6324	5801	9000
60-69						
13 weeks or less	1000	---	---	750	777	1131
14-26 weeks	1550	---	1800	1454	1454	1877
27-39 weeks	2533	---	---	2166	2163	3702
40-47 weeks	3809	5000	3916	2909	3811	6254
48-49 weeks	4500	4833	---	4250	4626	7391
50-52 weeks	5545	5770	5340	5653	4914	7800

Table 6.26. Median Earnings in 1969 of Females, by Age and Weeks Worked in 1969

Age and weeks worked	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30						
13 weeks or less	$ 614	$ 759	$ 676	$ 607	$ 677	$ 651
14-26 weeks	1425	1731	1500	1500	1507	1624
27-39 weeks	2195	2766	2300	2224	2386	2665
40-47 weeks	3000	3488	3458	3000	3421	3775
48-49 weeks	3408	4361	3843	3500	3790	4201
50-52 weeks	3852	4746	4388	4046	4169	4753
30-39						
13 weeks or less	616	809	661	687	657	616
14-26 weeks	1402	1600	1689	1333	1510	1459
27-39 weeks	2385	2804	2525	2229	2648	2539
40-47 weeks	3369	3891	3661	3227	3503	3677
48-49 weeks	3863	4281	3770	3500	3761	4081
50-52 weeks	4284	4926	4450	4413	4118	4919
40-49						
13 weeks or less	590	666	652	639	634	624
14-26 weeks	1405	1566	1565	1473	1267	1518
27-39 weeks	2268	2916	2730	2200	2233	2544
40-47 weeks	2911	3714	3734	3105	3246	3685
48-49 weeks	3576	3928	3718	3500	3452	4142
50-52 weeks	3989	4542	4083	4405	3761	4954
50-59						
13 weeks or less	613	---	625	673	606	637
14-26 weeks	1267	2125	1346	1200	925	1521
27-39 weeks	2137	2818	2750	2500	1833	2729
40-47 weeks	2679	3833	3277	2900	2730	3871
48-49 weeks	2909	4083	3444	2800	3024	4159
50-52 weeks	3617	4447	3915	3945	3199	4884
60-69						
13 weeks or less	750	---	---	850	614	695
14-26 weeks	1178	---	---	1277	808	1408
27-39 weeks	1375	---	---	2125	1439	2649
40-47 weeks	3045	---	---	2400	1937	3602
48-49 weeks	3277	---	---	---	2063	3675
50-52 weeks	3193	4833	3892	4000	2251	4545

Marital Status

Men who are married generally earn more than those who are not, particularly in comparison with younger men who have never been married (Table 6.27). Of those who have never been married, Indian men show the lowest and for ages 30 to 59 white men the highest median earnings. Among those married with spouse present, white men evince a distinct advantage in earnings over minority, especially black and Indian, men regardless of age.

For women under 30 years of age, earnings differences between those married with spouse present and those single are for the most part small (Table 6.28); however, after age 30, never married women usually average higher earnings. Widowhood, divorce, and separation (in comparison with married, spouse present) are also related to higher earnings for many white and minority women. Among women married with spouse present, Puerto Rican and white women tend to earn most and Mexican, Indian and black women least, while white never married women make substantially more than maritally similar minority women. Still, although never married Puerto Rican women make much less than similar white women, they also outearn other never married Spanish, Indian, and black women.

The earnings gap between men and women widens for those who are married with spouse present and narrows considerably among those never married, particularly under the age of 30, although single men generally earn slightly more than single women. But in the case of Puerto Ricans, young, never married women average slightly higher earnings than for young, never married men. Also, never married Indian women 50 years of age and over in comparison with similar Indian men show superior median earnings.

Children Ever Born

One of the primary impediments to the success of women in the labor market has been and continues to be the bearing and rearing of children. As indicated in earlier chapters, the traditional female role in American society is at least partly responsible for this feature. Nevertheless, cumulative fertility is negatively related to female labor market achievement. In general, the more children employed women have had, the lower their median earnings (Table 6.29). However, it should be remembered that education and fertility also tend to be negatively related. Since, women with fewer children are more likely to be highly educated, they should be expected to make more money when they work. In spite of this likelihood,

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Table 6.27. Median Earnings in 1969 of Males, 14-59, by Age and Marital Status

Age and marital status	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30						
Married, spouse present	$5601	$5587	$6755	$5220	$5440	$7453
Married, spouse absent	3833	4500	4875	3416	4192	5692
Widowed	3875	---	---	---	4300	5700
Divorced	5700	4500	5900	4200	5385	6440
Separated	4500	5142	3750	6500	4572	5944
Never married	2658	3390	3833	2119	2665	3661
30-39						
Married, spouse present	7028	6362	6818	6355	6402	9644
Married, spouse absent	4534	5833	4833	3857	5393	8263
Widowed	5500	6750	---	3666	4553	8121
Divorced	5909	6300	6375	5428	6117	8102
Separated	4857	5785	6250	6083	5292	7739
Never married	4990	5350	5166	3541	4765	7352
40-49						
Married, spouse present	6854	6436	6526	6396	6313	9909
Married, spouse absent	4578	5166	4125	5833	5164	8490
Widowed	5333	6500	---	2625	5286	8065
Divorced	6342	5625	4300	5277	5875	7992
Separated	4687	5500	5250	4500	4869	7973
Never married	4870	5166	4666	4150	4442	7104
50-59						
Married, spouse present	5996	6183	5555	6053	5672	8874
Married, spouse absent	3979	4833	4000	3375	4735	7774
Widowed	5857	---	---	4833	4345	7506
Divorced	5200	5666	3875	4437	5195	7201
Separated	4687	5500	---	5166	4355	7172
Never married	3472	3750	4875	2650	4111	6421

Table 6.28. Median Earnings in 1969 of Females, 14-59, by Age and Marital Status

Age and marital status	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 30						
Married, spouse present	$2627	$3436	$3277	$2536	$3084	$3486
Married, spouse absent	1956	3200	1666	1937	2620	2917
Widowed	3071	---	---	3500	3044	4987
Divorced	3181	4111	3500	3846	3609	4057
Separated	2108	3812	3000	2041	2984	3005
Never married	2239	3421	3117	1993	2550	3488
30-39						
Married, spouse present	2875	3664	3508	2847	3334	3263
Married, spouse absent	3194	3500	3333	2300	2977	3565
Widowed	3545	4600	3833	3000	2743	4662
Divorced	3761	4750	4333	4350	4040	4809
Separated	2944	3653	4500	2944	3248	3821
Never married	3852	4558	4409	3588	3379	5939
40-49						
Married, spouse present	2956	3760	3476	3287	3090	3744
Married, spouse absent	2772	3833	3428	2000	2869	3996
Widowed	2740	3533	3450	2166	2716	4438
Divorced	3694	4375	4230	3464	3826	5221
Separated	2600	4500	4000	3625	2967	4156
Never married	3338	4666	3958	3500	3138	6141
50-59						
Married, spouse present	2745	4013	3217	2964	2504	3904
Married spouse absent	2500	---	---	3000	2610	3935
Widowed	2426	3600	3875	3230	2299	4294
Divorced	3204	4125	3500	3416	3318	5046
Separated	2384	3875	---	4166	2516	4172
Never married	3138	3750	3416	3250	2796	5924

it is interesting to note that, although there is a tendency for earnings to decline with increasing parity, those who have never had children do not invariably outearn those who have, and, in some cases, not even more than those who have had as many as three children.

At given age and parity levels, white women do not invariably earn more than minority women, with one exception--ever-married women who have never had children. At the other end of the scale, Indian and Mexican women under 35 and black women over 35 make less than other minority women who have never had children.

Impact of Children on Female Earnings

Not only do the labor force participation rates of ever-married women decline with increasing numbers of children in the home (see Chapter 3), but this same inverse relationship is found for the earnings of working women (Table 6. 30). At given age and children-present levels, median earnings are highest for white women only in the children absent category. Moreover, the proportional loss in earnings with increasing numbers of children tends to be heaviest among white women, particularly after more than one child is in the household. For example, white women ages 20 to 29 with one child under 18 in the home earn 72% of the level of white women with no children; when the same comparison is two children versus one, the level drops to 55%. On the other hand, Puerto Rican women in the same age range with one child earn 88% of the level of those with none.

However, minority women with children in the home also experience in most cases notable declines in earnings in comparison with their ever-married counterparts without children in the home, but not invariably. For example, Indian women ages 20 to 39 with one child earn more than similar Indian women with none; thereafter, increasing numbers of children are associated with reduced earnings. This same pattern is also noted for black and Cuban women ages 30 to 49.

The proportional loss in earnings for all women with as opposed to those without children appears greater for those under age 30 rather than ages 30 to 49. The particularly negative influence of young children in the home (under six years of age) is also evident in Table 6. 30.

Household Heads and Family Size

The burden of providing for the family's welfare generally falls most heavily on the head of the household. The difficulty of adequately fulfilling this kind of responsibility is compounded for many household heads of larger families; such families are generally more typical of minorities in the United States. Moreover, the rising proportion of

Table 6.29, Median Earnings in 1969 of Ever-Married Women, by Age and Number of Children Ever Born

Age and number of children ever born	Mexican	Puerto Rican	Cuban	Indian	Black	White
Under 35						
none	$2656	$3816	$3645	$2482	$3302	$4019
one	2820	3420	3250	2555	3152	3310
two	2701	3406	3214	2755	3158	2859
three	2500	3264	2500	2708	2911	2562
four	2185	2642	916	2295	2674	2375
five or more	1843	1687	---	2062	2210	2266
35-49						
none	3818	4291	3775	3979	3513	5568
one	3288	4406	3657	3537	3593	4435
two	3373	4051	3644	3500	3735	3945
three	3394	3972	3450	3393	3536	3601
four	2869	3441	3500	3152	3128	3313
five or more	2405	3250	2400	2477	2373	3040
50-69						
none	2852	3736	3426	3625	2411	5010
one	2857	3923	3453	3333	2417	4229
two	2848	3928	3030	3133	2519	4063
three	3000	4071	2850	3288	2440	3740
four	2592	3277	2500	2650	2053	3473
five or more	1980	3750	1875	2420	1687	3087

Table 6.30. Illustrative Median Earnings in 1969 of Ever-Married Women, 20-49, by Age and Presence and Number of Children in the Household

Age and number of children	Mexican	Puerto Rican	Cuban	Indian	Black	White
Children under 18 years of age						
20-29						
none	$3646	$4240	$4119	$3187	$3988	$4558
one	2886	3750	3178	3300	3546	3270
two	2474	3425	2700	2571	3198	2524
three	2244	2875	1250	2464	2676	2176
four or more	1500	1875	833	2437	2288	1945
30-39						
none	3532	4375	3875	3500	3784	5091
one	3414	3921	3934	3653	4137	4183
two	3257	3666	3526	3375	3899	3353
three	3195	3966	3029	3442	3408	2940
four or more	2420	3000	2937	2459	2609	2490
40-49						
none	3609	4052	3577	3848	3392	4500
one	3158	3826	3594	3479	3556	3839
two	2812	3821	3673	3315	3233	3489
three	2858	3500	3500	2730	2961	3239
four	2288	2857	---	2375	2159	2889
Children Under 6 years of age						
20-24						
none	3357	4263	3750	3116	3616	4151
one	2318	3192	3214	2192	2949	2733
two	2111	2666	1500	1937	2327	1737
three	1750	---	---	2200	1550	1274
25-29						
none	3300	3960	3625	3733	3911	4841
one	2859	4176	2700	3360	3601	3217
two	2157	3000	3500	3125	2884	2055
three	1812	---	---	1875	1940	2007
30-34						
none	3047	3764	3578	3458	3632	3735
one	3066	3153	3294	2642	3304	2921
two	2704	3400	3500	1863	2571	2109
three	2214	---	---	---	2300	1691

Table 6.30. Continued

Age and number of children	Mexican	Puerto Rican	Cuban	Indian	Black	White
35-39						
none	3234	4085	3709	3357	3604	3634
one	2716	3550	3812	2757	3121	2949
two	2772	3500	2250	2625	2548	2458
three	843	---	---	2333	2142	2482

female-headed households among both the black and white populations (ayghe, 1974) calls for greater awareness of and attention to this phenomenon in the future. Consistent with this need, both male and female heads of household are considered in the following analysis. Primary concern here will be whether earnings of minority family heads of similar-sized families as whites differ from those of white household heads.

As one could easily predict on the basis of previous indications in this chapter, white male heads earn more, in most cases substantially so, than minority male heads regardless of age (limited here to those under 50 years of age) and family size (Table 6.31). White female heads also indicate, somewhat in contrast to their more intermediate earnings noted earlier in relation to a number of variables, an earnings superiority over most minority female heads at most family size levels.

Median earnings for men invariably increase in going from two to three family members and in most cases increases up to five members; thereafter, earnings tend to decline with size, except for young Cuban men heading six member households.

An interesting contrast in the pattern of earnings in relation to family size is provided by Mexican and black women. Regardless of age, earnings of Mexican female heads tend to increase while those of black female heads decrease with increasing family size. In further contrast, white female heads indicate little change in earnings with increasing family size for those under the age of 35 but a decline for those ages 35 to 49. Although the pattern noted for Mexican females here is not as clean and linear in form as for black women, this does suggest the operation of favying familial-cultural norms. Within that perspective, the difference may lie in the degree to which larger Mexican families are more characterized by extended family members (e.g., grandmothers) whose fairly constant presence provides free day care of children.

Regardless of age and family size, male heads of household average higher earnings than female household heads. Even the lowest figure for men in each of the respective populations is greater than the highest figure for women.

CITIZENSHIP

Native born minority men earn substantially less on the average than native born white men (Table 6.32). This is true in spite of the fact that native born white men earn less than white men who are naturalized U.S.

Table 6.31. Median Earnings in 1969 of Heads of Families or Subfamilies, 14-49, by Sex, Age and Family Size

Sex, age and family size	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Under 35						
two	$ 4803	$ 5312	$ 6111	$ 4987	$ 5436	$ 6897
three	5591	5586	6931	5356	5760	7646
four	6506	6131	7340	6026	6060	8734
five	6567	6416	7041	5897	5995	9083
six	6359	6296	7750	5763	5755	8919
seven or more	5990	5269	6833	5553	5087	8458
35-49						
two	6485	5980	5750	5948	6152	8811
three	6895	6562	6302	7196	6569	9404
four	7493	6352	6603	6750	7005	10263
five	5261	5807	5350	5650	5395	8929
six	5511	5961	6416	5937	5188	8833
seven or more	4713	5666	6600	4722	4425	8155
Female						
Under 35						
two	3147	3833	3583	3250	3371	3945
three	3043	4208	4571	2863	3242	3918
four	3270	4000	---	3071	3048	4061
five	3142	---	---	3142	2702	3976
six	3428	---	---	---	2670	3827
seven or more	3666	---	---	---	2164	4100
35-49						
two	3756	4090	4156	3500	3711	5133
three	3224	5035	4000	3550	3672	4873
four	3444	4666	3833	3500	3333	4718
five	3380	3833	---	2500	2921	4448
six	3800	---	---	4000	2943	4328
seven or more	2500	---	---	1857	2180	4041

Table 6.32. Median Earnings in 1969 of Persons, by Sex, Age and Citizenship*

Sex, age and citizenship	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
Under 35						
Naturalized U.S. Citizen	$4693	---	$7603	---	$5520	$8267
Alien	4580	---	5849	---	5166	7572
Native Born	5337	5315	6071	4685	4855	7283
35-49						
Naturalized U.S. Citizen	6241	---	7395	---	6896	10797
Alien	5682	---	5835	---	5808	9292
Native Born	7036	6296	8928	6079	6051	9645
50-69						
Naturalized U.S. Citizen	5669	---	6766	---	6352	8439
Alien	4698	---	4734	---	5264	6984
Native Born	5641	5765	5100	5440	4998	8224
Female						
Under 35						
Naturalized U.S. Citizen	2816	---	3939	---	4181	4002
Alien	2146	---	3179	---	3581	3722
Native Born	2658	3530	3250	2495	3030	3523
35-49						
Naturalized U.S. Citizen	3053	---	4205	---	4295	4095
Alien	2572	---	3455	---	3631	3757
Native Born	3169	3987	3333	3186	3187	3947
50-69						
Naturalized U.S. Citizen	2759	---	3870	---	3954	4042
Alien	2307	---	3010	---	3347	3644
Native Born	2653	3801	3500	3015	2223	4089

*Does not include persons born abroad of American parents citizens. Of native born minority men, only Cubans come reasonably close to native born whites in median earnings; this occurs for those in the prime working age years (35 to 49), where less than eight hundred dollars separates their respective median figures.

Alien Mexican, Cuban, and black men, 35 to 49, earn about the same, although less than same-age whites. Differences among minority men who are naturalized citizens are more in evidence throughout the age range but with whites again most favored. Native born Mexican men earn more than other Mexican men, particularly aliens. They also average higher earnings than Puerto Rican, Indian, and black men who are native born and in the 35 to 49 age range. However, part of the native born earnings advantage of Mexicans over Puerto Ricans may be attributable to the uni citizenship position of Puerto Ricans (see Chapter 2), many of whom have migrated to the U.S. mainland but are nevertheless coded as native born.

Native born minority men do not in every case earn more than their naturalized counterparts. Nor as noted earlier is the earnings superiority of natives substantiated among white men. This suggests the changing nature of immigration to the U.S. that merits some consideration in this context.

It is perhaps an unquestioned assumption that native born citizens have a natural labor market advantage over other residents of the United States. In a number of respects, this is no doubt the case. But as a recent Manpower Administration report indicated (North, 1974), immigrants have been increasingly becoming older, more likely to be skilled and married than in the past, and more likely to be professional or craftsmen than Americans generally. Moreover, the immigration system is heavily weighted in favor of relatives of earlier immigrants. The implication of this fact, in addition to their greater skill level, is that more recent arrivals probably experience a smoother transition into American society than previously was true. But while this is the situation overall, it may not operate equally for all immigrant groups. For example, the relative ease of movement into the U.S. by Mexicans is less occupationally selective of the professional and crafts range while disproportionately selective of farm and nonfarm laboring.

Among native born women, Puerto Ricans and whites show highest earnings; similar Mexican, Indian, and black women make less than Cuban women. Employed white women who are naturalized U.S. citizens tend to make much more than Mexican but about the same as similar Cuban and black women. However, alien white women predominate over alien women in all three of these female population groups. In general, whether Mexican women are naturalized or native born alone appears to have little effect on their earnings.

SUMMARY

The labor market advantage observed throughout this study of white men over Spanish, Indian and black men in the United States continued to manifest itself in the realm of earnings. Likewise, the less consistently dominant but general favorability of white in comparison with minority women also obtained, with the median earnings of white women exceeding those of all other female populations in this study. Average earnings for American Indians, were for the most part highly unfavorable. Among Spanish men, Puerto Ricans were frequently on the lower end of the earnings scale, while Cuban men tended to earn more than other minority men but still less than white men with similar characteristics. Moreover, Cuban men did not invariably indicate higher earnings than all minority men under all the conditions imposed in the analysis, and, despite their higher average yearly earnings, they still trailed the average earnings of white men by more than $1300.

An earnings redistribution of 25% or more would be required to equalize earnings distributions of minority in comparison with white men; between 10% and 20% redistribution would be needed among women. The utility of education alone to equalize earnings in the long run is called into question by the finding that increasing education did not on the whole reduce the relative earnings gaps between similarly-educated white and minority men; in the few cases it appeared to do so, substantial discrepancies nevertheless remained. Concerning the question of who benefits most from increasing education, relative gains in earnings with increasing education were not uniformly present. In general, women gained more than men. This is probably due at least in part to a greater tendency on the part of more highly educated women to work on a full-time basis when they work. Among men, Indians seemed to experience disproportionately improved earnings with increasing education(in relation to the gains for other men), while Indian women shared a similar distinction with black women. The gain for Mexican women was notable but relatively small for Cuban females.

The overall advantage in earnings of Cuban over Puerto Rican and Mexican men would appear to be largely a function of age composition and educational attainment (and also in the case of Mexican men, concentration in agriculture), since Mexican and Puerto Rican men more often than not averaged higher earnings than Cuban men at specified age-education intervals. This may be important from the standpoint that Cubans are thought by many to be favored among the Spanish peoples in the U.S. However, the institution of such controls did not alter the basic relationship of minority to white earnings. Moreover, the age-education composition explanation for the relative earnings advantage of Cuban over other Spanish men does not appear to be satisfactory in the case of the superior earnings of white over minority men.

As with education, controlling for vocational training did not equalize earnings for white and minority men. The same can also be said in relation to major occupation, industry, and class of worker. Furthermore, among men prime work force ages 30 to 59 who worked 50-52 weeks in 1969, white men averaged earnings fifty dollars or more per week than minority men; black men, who in general did not fare well in comparison with men of Spanish origin, earned less than other minority men working a full year. Equally important may be the fact that increases in weeks worked did not reduce the relative gaps in white and minority earnings.

As Chapter 3 indicated, patterns found in relation to labor force participation could be expected in some cases to diverge from those to be noted in other phases of this study because of differences in base populations. This was perhaps no more evident than in the low labor force participation but relatively high (in comparison with other females) median earnings of Puerto Rican women. Under a number of conditions (e.g., occupation groups) and several age intervals, Puerto Rican women showed median earnings higher than for white and other minority women. Although it was speculated that the heavy concentration of Puerto Ricans in New York City, with its generally higher than national average wages and salaries, may have been reflected in this observation (an explanation that does not appear to be of similar utility in the case of Puerto Rican men), it is uncertain at this time why such a pattern prevailed, since the selectivity of those women who work and the average number of hours worked are important factors about which there is insufficient information. Of course, earnings of Puerto Rican women, as was true for women generally in this study, were almost invariably substantially below those of men regardless of controls.

Although white men continued to maintain an earnings advantage over minority men regardless of marital status, white and minority men tended to "respond" similarly to the influences of varying marital states. For example, median earnings were higher for men who were married with spouse present than for those never married. While exhibiting a pattern the reverse that for men, women also responded in the expected fashion (higher average earnings for never married or some form of marriage-disrupted state than for the married-spouse present), with white women dominating among the never married. The earnings advantage of white women was less apparent among the spouse present women though manifest in relation to most minority women. Main exceptions to this latter pattern at several age levels were higher earnings of Puerto Rican and Cuban married-spouse present females. Women achieved nearest the attainment level of men in comparing those never married.

The progressively negative influence of increasing CEB on all women's earnings was strongly in evidence, with the advantage of white over minority women sharpest in comparing women who never had children. Perhaps because of this initial advantage, the proportional loss in earnings associated with increasing CEB was also greatest for white women, although minority women also suffered notable declines in their earnings as parity increased.

White male and, to a lesser extent, female household heads earned more than minority men and women who headed households in 1969 regardless of age and family size. Interestingly, however, earnings for Mexican female heads tended to increase with increasing family size for most ages, while those for white and black female heads either changed little or declined with increasing family size. Male heads in each population group substantially outearned their female counterparts.

The changing nature of immigration to the United States, especially since 1965, probably underlies one of the more fascinating results of this study. Native born minority and white men and women did not indicate in all cases a clear and consistent advantage in average earnings over their naturalized cousins. But the more usual pattern of superior earnings for white over minority men once again prevailed.

Finally, the data in this chapter, particularly those showing inequalities in average earnings when differences in years of schooling are controlled, point rather strongly to the presence of discrimination against minorities, especially men. Whether this discrimination in the earnings status of minorities is primarily a function of processes in the labor market itself or of processes external to the labor market is difficult to say. The answer to this question is surely more complex than the dichotomous nature of the question suggests. As noted in the opening chapter, the census data used in this analysis necessitate a focus on discrimination as an end product rather than as a process. As a result, the processes which lead to discrimination in earnings have yet to be explained. One major possibility is that the educational processes themselves are not equal, with the result that minorities who attain the same amount of education, as indicated by years of school completed, are not equal in educational attainment with the majority population. If this is the case, then the effects of discrimination in educational institutions are carried over to the labor market.

CHAPTER 7

CONCLUDING COMMENTS

Evidence in this study leads to four general conclusions. (1) Color-ethnic-sex inequalities in status permeate the American labor market. (2) Spanish origin, American Indian and black men are discriminated against in their labor force participation, occupational achievement, mobility and earnings. (3) Women in these minority groups, along with white women, are subject to severe discrimination, the magnitude of which is far greater than that experienced by minority men. (4) Inequalities among women in the labor market are comparatively small and the status of minority women is not consistently inferior to that of white women. These strong, sweeping generalizations obviously oversimplify a complex situation, although they are basically consistent with the massive evidence examined in this monograph.

INEQUALITY OR DISCRIMINATION

Conclusions of discrimination against minorities are more powerful than the easier and more commonplace identification of inequalities. Conceptually, inequality and discrimination have been distinguished as two different but overlapping phenomena in this study. To reiterate the distinction posed in Chapter 1, an inequality is simply an observable difference which is interpreted as discrimination only when inequalities are found between persons equally qualified for participation and achievement in the labor market. As an aspect of discrimination, "equal" is defined on the basis of a high degree of similarity with respect to preparation and readiness for employment. Primary indicators of qualifications are educational attainment, vocational training and health. On the average, one group may rank below another on the basis of qualifications (and also on achievements), although some individuals in a lower-ranking group are as qualified as members of a higher-ranking group.

The concept of inequality (or equality) constitutes a basis for two analytic models: an inequality model and a discrimination model. An inequality model in which minorities typically are less advantaged than a majority can be viewed as a weak form of a discrimination model. Deeply rooted in historical circumstances, intergroup inequalities are plentiful and often serve to justify categorical discrimination against all members of disadvantaged minorities. People are not only treated as different but also are judged inferior when they are characterized as less well educated, unemployed, in poverty, "ghetto" residents with numerous children, and as foreigners who speak a different language. In an inequality model intergroup differences in the labor market are hypothesized as results of discrimination in the past and in sectors of activity outside the labor market. Nevertheless, consequences for entire groups of minorities are that they are disadvantaged in the job market.

A discrimination model, in contrast, is a strong model in that status inequalities between equally qualified persons are the major criterion. In its strong form, minority characteristics themselves, rather than differences in background and in average characteristics, account for inequalities. To the extent that discrimination in the labor market exists, minority characteristics--color, ethnicity and sex--explain differences in participation and achievement. Accordingly, persons with similar levels of education attainment, vocational training and health should occupy similar statuses in the labor market, if there is no discrimination.

The refinement of conclusions by employing the strong rather than the weak model can be illustrated briefly. Mexican men are found to be disadvantaged in comparison with white men on all major status components in the labor market. Mexican men also tend to rank below white men when men of equal educational attainment are compared. Hence, it can be concluded that Mexican men are discriminated against whether one applies the weak or the strong model. However, black women as a whole are outranked by white women, but among college graduates black women reverse the pattern with higher levels of occupational achievement and earnings than white women. Conclusions under the strong model are therefore different. On the basis of this information alone, black college women do not appear to be subject to discrimination in the labor market.

INTERGROUP INEQUALITIES

Inequalities among color-ethnic-sex groups are evident everywhere for each of four major components of status in the American labor market--labor force participation, occupational achievement, mobility and earnings. In broad profile, inequalities between whites (as the majority) and Mexicans, Puerto Ricans, Cubans, Indians and blacks (as minorities) show white men in a clearly advantaged position. In comparison with white women, minority women are less extremely disadvantaged than minority men, whereas all women (as a minority, including white women) are disadvantaged by comparison with men.

Labor force participation rates reflect the traditional pattern of considerably higher participation of men than women (Table 7.01). Mexican and Puerto Rican women show the lowest degree of participation, less than half of the participation levels of Cuban and white men who are the most active participants in the labor market. Black and Puerto Rican men's LFP is lowest among men, and black and Cuban LFP is highest among women.

The range of intergroup differences is relatively narrow for employment rates, both among minorities and between the sexes (Table 7.01). More than 90% of each of these groups in the labor force were employed in 1970. Despite the small degree of differences in ER's, white men had a higher ER than minority men and white women were higher than minority women. Without exception, each of the male populations had higher ER's than their matching females. White women's ER, however, was slightly above the level of Mexican, Puerto Rican and black men.

Average levels of occupational achievement for Mexican, Puerto Rican and black men place them at the bottom of the occupational structure, while Cuban and Indian men score slightly higher (Table 7.01). White men, of course, average the highest level of occupational achievement and they are also most occupationally mobile. Moreover, white males who changed occupations between 1965 and 1970 were more likely than other men to be upwardly mobile and to move the longest distance toward the top of the occupational scale. Among the downwardly mobile men, whites descended shorter distances than minority men. The generally advantaged position of white men carries over to their earnings, where they averaged about $2,000 more than Indian and black men in 1969 and at least $1,300 more than Mexican, Puerto Rican and Cuban men.

In sum, inequalities between white and minority men most generally favor whites, with Cubans in the second highest position on most counts. Mexican, Puerto Rican, Indian and black men rank consistently low, with one or another at the bottom of the hierarchy dpending on the specific criterion employed.

The range of inequalities is often less among women than among men, although in relative terms this is not always true. For example, absolute differences between mean occupation scores for Mexican men (33) and white men (46) are greater than for Mexican women (21) and white women (31). Proportionately, however, the average occupation scores for Mexican women as well as men are about two-thirds as high as the scores for white women and men (Table 7.01). White women outrank minority women on occupational achievement and earnings. Average levels of occupational achievement differ very little among minority women, whereas the earnings of Mexican, Indian and black women are lower than the earnings of Puerto Rican, Cuban and, of course, white women. Cubans and Indians are the most occupationally mobile women, but black women proportionately are

Table 7.01. Summary of Status Achievement and Mobility by Sex

Sex and group	LFPR	ER	OCC 70	Percent		RMS		Median earnings
				Mobile	Up	Up	Down	
Male								
Mexican	87	94	33	39	59	21	34	$5757
Puerto Rican	82	94	32	41	56	21	35	5721
Cuban	90	96	38	52	53	26	38	6025
Indian	76	89	36	46	58	23	34	5339
Black	82	94	32	36	58	20	33	5317
White	89	97	46	37	60	28	32	7369
Female								
Mexican	39	91	21	38	49	19	50	2747
Puerto Rican	34	92	24	34	41	19	46	3720
Cuban	55	93	23	40	49	23	49	3500
Indian	39	89	24	44	50	22	49	2862
Black	54	92	22	35	56	21	52	2913
White	47	95	31	37	47	24	45	3831
Ratios								
Mexican	.45	.97	.64	.97	.83	.90	1.47	.48
Puerto Rican	.41	.98	.75	.83	.73	.90	1.31	.65
Cuban	.61	.97	.60	.77	.92	.88	1.29	.58
Indian	.51	1.00	.67	.96	.86	.96	1.44	.54
Black	.66	.98	.69	.97	.96	1.05	1.57	.55
White	.53	.98	.67	1.00	.78	.86	1.41	.52

the most upwardly mobile. Black women, however, move relatively short distances upward and long distances downward.

White women are no more immune from sex inequalities than minority women. Women's labor force participation is substantially lower than men's, and the occupational achievement of women generally is about two-thirds as high while their earnings are barely half as high as for men. Puerto Rican women come closer to matching the achievement and earnings levels of Puerto Rican men than is the case for other women and men. White women are as occupationally mobile as white men, but they move upward less often and for shorter distances than white men. Among blacks, women are almost as mobile as men, and women do about as well in moving upward. Among downwardly mobile workers, all women descen further toward the bottom of the occupationally structure than men. Women, in short, almost invariably rank behind men.

DISCRIMINATION

Discrimination in the labor market not only works against minorities but is typically more severe for those who are doubly disadvantaged by their minority status and by their lack of preparation for the labor market. Inequalities, as we have just seen, favor whites over Spanish, Indian and black workers, and men over women. The fact that these inequalities fail to disappear when workers are similarly qualified is disturbing for two reasons. First, consistent with principles of equal opportunity, differences in achievements are expected to disappear. Second, minority workers who are also handicapped by a relative lack of preparation suffer the greatest degree of discrimination. Thus minority men and women relatively lacking in education are comparatively worse off than those who have attained higher levels of education. Similarly, between the sexes, women with relatively little education suffer the double disadvantage of their sex status and their lack of schooling; minority women therefore are triply disadvantaged.

Effects of discrimination and double disadvantagement can be demonstrated by taking levels of educational attainment as an indicator of preparation for achievement, although results would be much the same if vocational training or disability were used.

Discrimination is indirectly and partially evident in labor force participation and employment (Table 7.02). First, for those with eight years of schooling, LFPR's for Mexican, Puerto Rican and Cuban men are higher than for white men but ER's for minority men are either about

Table 7.02. Summary of Labor Force Participation and Employment, by Sex and Education

Sex and education	Mexican	Puerto Rican	Cuban	Indian	Black	White
	Labor force participation rates					
Male						
Elem. 8	.88	.94	.90	.70	.79	.80
H.S. 4	.93	.90	.92	.86	.89	.94
College 4	.96	.94	.95	.92	.93	.95
Female						
Elem. 8	.35	.30	.52	.30	.46	.36
H.S. 4	.54	.51	.60	.52	.64	.50
College 4	.65	.57	.70	.64	.82	.56
	Employment rates					
Male						
Elem. 8	.94	.94	.96	.86	.94	.96
H.S. 4	.95	.96	.96	.89	.94	.97
College 4	.97	.97	.94	.98	.98	.98
Female						
Elem.8	.89	.93	.92	.85	.92	.94
H.S. 4	.93	.93	.94	.92	.92	.96
College 4	.97	1.00	.94	.95	.98	.98

the same as for white or lower. The pattern is similar among women, with comparatively high LFPR's and slightly lower ER's for Cuban and black women. To the extent that LFPR's represent an effort to be active in the labor market and ER's indicate success in obtaining employment, minorities tend to be disadvantaged at this comparatively low educational level. Second, for those who have graduated from high school, LFPR's and ER's for minority men are not quite up to the level of white men. Minority women are more likely than white women to be in the labor force, but less likely to be employed. Third, for college graduates, differences in LFP and employment between minority and white men have diminished, whereas minority women are more likely to be in the labor force, but not necessarily to be employed.

These patterns pose difficulties for interpretation because of instabilities over time in LFPR's and particularly of ER's and because of different circumstances and reasons for being in the labor force. Labor force participation, employment and unemployment change sometimes rather quickly and at different rates for different segments of the population and in different localities and industries. The cross-sectional data from the 1970 census capture a changing pattern at one point in time and it is uncertain whether the observed relationships tend to persist or not. This uncertainity is more of a problem for labor force participation (particularly for unemployment) than for other components of status. There are indications, however, that minorities benefit the most during periods of high employment and suffer the most during periods of business recession.

Reasons for being in the labor force (and either employed or unemployed) are extremely diverse. White women, who show comparatively low LFPR's, may be subject to less pressures to enter the labor market for economic reasons than black, Mexican or Puerto Rican women. White women in the labor force nevertheless are more likely to be employed than most minority women. In addition to their instability, unemployment rates can be deceptive in the sense that some workers are so thoroughly discouraged that they leave the labor force and are not officially classed as unemployed.

With certain notable exceptions, levels of occupational achievement and earnings of minority men and women are lower than comparable white men and women (Tables 7.03-7.04). At each of three levels of educational attainment--completion of elementary, high school and college--the occupational achievement and earnings of minority men are lower than for white men. The fact that differences in occupational achievement between minority and white men tend to diminish at the college level (except for Cuban men) implies that discrimination is less among those with higher education. However, differences in earnings between minority and white men are greater among college graduates (with the exception of Indian men). These results suggest two inferences. First, at lower educational levels minority men's achievement and earnings represent similar degrees of discrimination (although this is not the case for Indian and black men), and

Table 7.03. Summary of Occupational Achievement and Earnings by Sex and Education

Sex, occupational achievement, earnings and education	Mexican	Puerto Rican	Cuban	Indian	Black	White
Male						
OCC70						
Elem. 8	31	29	31	31	28	35
H.S. 4	37	36	37	37	33	43
College 4	64	59	53	64	61	66
Earnings						
Elem. 8	$5964	$5581	$5318	$4719	$5025	$7001
H.S. 4	6715	6416	6139	5877	6022	8332
College 4	8666	9416	7326	8954	7958	12143
Female						
OCC70						
Elem. 8	17	18	16	17	12	19
H.S. 4	25	26	24	24	23	28
College 4	61	60	38	61	65	62
Earnings						
Elem. 8	$2566	$3544	$3264	$2306	$2081	$3154
H.S. 4	3333	4081	3650	3197	3425	3854
College 4	5514	6125	4055	6583	6394	5943

Table 7.04. Summary Ratios of Minority to White Occupational Achievement and Earnings by Sex and Education

Sex, occupational achievement earnings and education	Mexican	Puerto Rican	Cuban	Indian	Black
Male					
OCC70					
Elem. 8	.88	.83	.88	.88	.80
H.S. 4	.86	.84	.86	.86	.77
College 4	.97	.89	.80	.97	.92
Earnings					
Elem. 8	.85	.80	.76	.67	.72
H.S. 4	.80	.77	.74	.70	.72
College 4	.71	.78	.60	.74	.66
Female					
OCC70					
Elem. 8	.89	.95	.84	.89	.63
H.S. 4	.89	.93	.86	.86	.82
College 4	.98	.97	.61	.98	1.05
Earnings					
Elem. 8	.81	1.12	1.03	.73	.66
H.S. 4	.86	1.06	.95	.83	.89
College 4	.93	1.03	.68	1.11	1.08

second, at higher levels of educational attainment occupational discrimination is relatively slight and earnings discrimination is relatively great. Mexican and Indian college graduates come close to matching the average level of occupational achievement of white men, but otherwise minority men's status is well below that of white men.

Analysis of discrimination against minority women presents a different picture (Tables 7.03 and 7.04). Minority women are generally discriminated against in their occupational achievement but not necessarily in their earnings. Discrepancies in average levels of occupational achievement between minority and white women diminish considerably among Mexican, Puerto Rican and Indian college graduates. Black women college graduates even surpass the occupational levels of comparable white women. Cuban college women, however, suffer in comparison with other college women and also in comparison with the relative levels of achievement of Cuban women at lower educational levels.

The average earnings of Cuban women also place them in a disadvantaged position relative to other college women, including white women. The earnings of Mexican, Indian and black women tend to converge with those of white women at the college level, and Indian and black college women average slightly higher earnings than white college women. Puerto Rican women at all three educational levels average higher earnings than white women. Thus, in contrast with the evidence on discrimination against minority men, comparisons among women suggest a lesser degree of discrimination against minority women. In specific instances, notably Indian and black college women and all Puerto Rican women, it might be argued that there is no evidence of discrimination among women in occupational achievement and earnings.

Sex discrimination, much in evidence throughout this study, is amply illustrated with respect to levels of occupational achievement and earnings (Table 7.05). As with intergroup discrimination, sex discrimination is most evident at lower educational levels where women's mean occupation scores and earnings are only about half the levels of men in each of the color-ethnic groups. Sex inequalities tend to diminish among high school and particularly among college graduates. College women (Cuban women being the exception) come close to achieving the same average occupational levels as comparable men. Puerto Rican and black college women in fact average slightly higher occupational scores than Puerto Rican and black men, while Mexican, Indian and white women come within about 95% of the average occupational levels of their men. Differences in average earnings, however, are relatively large. The earnings of Mexican, Indian and black women tend to converge with the earnings of men at the college level, but this convergence is not evident for other groups. The average earnings of black college women come closest to equaling the earnings of their male counterparts, but still represent only 80% of the level of black men's earnings. Ratios of black

Table 7.05. Summary Ratios of Female-to-Male Occupational Achievement and Earnings by Education

Occupational achievement, earnings and education	Mexican	Puerto Rican	Cuban	Indian	Black	White
OCC 70						
Elem. 8	.55	.62	.52	.55	.43	.54
H.S. 4	.68	.72	.65	.65	.70	.65
College 4	.95	1.02	.72	.95	1.06	.94
Earnings						
Elem. 8	.43	.64	.61	.49	.41	.45
H.S. 4	.50	.64	.59	.54	.57	.46
College 4	.64	.65	.55	.74	.80	.49

women's to black men's earnings are less than for occupational achievement at all three educational levels, despite the high level of black college women's occupational achievement. White women fare worse than other women in the sense that their earnings are less than half the level of white men's earnings at all educational levels.

In terms of average earnings, Indian, black and Puerto Rican college women average lower earnings than white high school men. Earnings of white college women ($5,943) are lower than the averages for all high school men (except Indians). Moreover, the earnings of high school women are well below the averages for men with eight years of elementary education.

POLICY IMPLICATIONS

Results of this study bear directly and indirectly on a number of policy issues. Five very broad aspects of social policy will be discussed briefly: preparation for employment and achievement in the labor market, discrimination by employers, immigration and citizenship, sex discrimination and relevant areas not directly examined in this study.

The importance of skill acquisition, or more generally, of preparation and readiness for achievement in the job market has been demonstrated in a number of studies and through daily experiences for many years. In a modern industrial society, those with the highest levels of educational attainment also manifest the highest levels of status achievement in the labor market. White Americans average more years of school completed than Spanish, Indian and black populations, although this disparity is diminishing. Oriental Americans, on the other hand, now average higher levels of educational attainment than whites, and their success in the labor market coincides with their educational levels (see Volume II of this study).

Improved educational levels of Spanish origin persons, American Indians and blacks may not guarantee the disappearance of inequalities and discrimination, but there is every indication that the magnitude of intergroup differences in the labor market will be reduced. Educational attainment is an important determinant of the first job and early career of a worker, and the level of entry into the occupational structure influences subsequent occupational achievement. Since the effects of educational attainment diminish the longer a worker is in the job market (Blau and Duncan, 1967), formal schooling is more important for the success of the younger than for the older worker.

A recommendation to increase the years of school completed by young people in the more disadvantaged populations merits more serious attention than it has received. This is not at all a novel recommendation, and there is evidence that educational gaps are already being reduced. Neither does this recommendation mean that all persons should attain the same educational level. The primary intent is to remove intergroup differences in education so that all Americans have the same opportunities for education and that each group averages about the same. Successful accomplishment of this objective would not only remove intergroup differences in education but, under conditions of nondiscrimination in the labor market, also reduce differences in participation and achievement. Removal of differences in the number of years of school completed is a relatively simple task. Much more difficult is the task of equalizing the qualitative aspects of schooling. In the ultimate sense, programs that assure everyone the same kind and quality of learning at any given level of schooling may not be realized, but this nevertheless represents a worthy goal toward which the American educational system should strive.

Equality in educational attainment by itself is not sufficient to assure the reduction of gross inequalities and discrimination in the labor market. Intergroup educational equality is a necessary step toward equality in the job market. At best the effects of improved education for disadvantaged minorities in the job market will not be widespread for a period of years, partly because educational disparities exist among older workers.

Vocational training therefore provides a more immediate means of reducing intergroup differences in the labor market, the effects of which can be recognized over a relatively long period of time. By its very nature, vocational training is aimed at developing immediately applicable job skills--something which educational institutions are often charged with failing to do.

It is recommended therefore that removal of inequities in vocational training be accomplished as speedily as possible so that all persons interested in and who may benefit from job training have access to training programs. Mexican, Puerto Rican and black men and women and Indian women in the labor force in 1970 less frequently reported having had vocational training than white men and women. Thus the relative lack of education is compounded for these people by lesser participation in job training programs. Cuban men and women and Indian men showed relatively high participation in job training programs, providing an apparent advantage as reflected in various aspects of their status achievements in the labor market.

The American labor market is dominated, among other things, by the English language, and workers lacking capability to communicate effectively are handicapped by this factor alone. Mexican immigrants in particular appear to be disadvantaged in this respect. Specific difficulties in language adjustment vary among the Spanish origin, American Indian and black populations, and there are varying degrees of need for language training. Although native born, many Indians and blacks, especially from the rural South, lack facility in conventional ways of speaking and writing. Puerto Rican natives too, although legally native citizens, often suffer a language problem on the mainland.

Expanded and improved programs of language instruction are recommended as an important part of the general effort to remove discrimination against minorities. Work skills do not always depend on comparable skills in language, but the lack of fluency in the English language often serves as a barrier to achievement in the labor market. This recommendation, aimed at improving ability to communicate effectively in the English language, implies nothing about the native or usual languages of minorities. It is not a recommendation for a single language for everyone, rather it is intended that those who can benefit from improvement in the English language have the opportunity to do so.

Discrimination in the employment, upgrading and pay of Spanish origin, Indian and black workers is evident. Women in particular are objects of discriminatory practices. With few exceptions, such as black women college graduates, minorities as well qualified as the majority, on the basis of educational attainment, vocational training and health, typically fell short of matching the status achievements of the majority.

Discriminatory practices on the part of employers are not to be condoned under the national commitment to nondiscrimination. While a number of existing programs are designed to reduce discrimination in the labor market and progress in this direction has been accomplished, there were many indications that discrimination was widespread in 1970. Despite improvements, it is extremely doubtful that discrimination has disappeared by the mid-1970's. The benchmark data provided in this study will serve to reassess discrimination when the 1980 census data become available. In the meantime, the nationwide effort to remove discriminatory employment practices must be strengthened.

Present affirmative action programs may gradually reduce intergroup inequalities in the labor market, although it is not clear that discrimination will be reduced. Employment aimed at meeting "quotas" encourages filling vacancies with appropriate minority personnel at the expense of ignoring equally qualified persons. A history of inequality and discrimination alone is insufficient justification for employment. The emphasis, as stressed throughout this study, should be on qualifications for work. Hence, the emphasis in action programs needs to be more nearly on qualifications of workers than on the filling of quotas. It is, in fact, a disservice to workers to employ them "above" their skill levels, a practice which will doom many to failure.

Accuracy and precision in the techniques of assessing workers' skills and performance have yet to be accomplished. This results in a rather wide latitude in employers' decisions about which persons are most qualified. The goal of establishing rational and objective criteria for evaluating the performance and potential of workers may be unobtainable, at least in the near future. Nevertheless, there should be a concerted effort in this direction.

In the meantime, employers must be encouraged--and regulations must be enforced--to follow employment practices devoid of discrimination based on color, ethnicity, age or sex.

Questions and issues concerning American immigration policy relevant to Spanish origin, American Indian and black populations are diverse. There is relatively little immigration of blacks or Indians, and Puerto Ricans are U.S. citizens by birth. Cuban immigrants have come for more than a decade as political refugees. Both Mexicans and Puerto Ricans have come to the States in search of jobs and in response to a demand for labor. Mexicans have entered the United States both legally and illegally (e.g., the "Wetbacks"). The current circumstances and immigration histories of each of these populations obviously differ in a number of ways.

Since 1965 national immigration policy has been essentially non-discriminatory on the basis of national origin and race and consistent with the general development of an equal rights and opportunities policy. It is recommended therefore that the present open-door policy be maintained and strengthened by making administrative regulations and procedures more efficient.

Mexican immigrants continue to be hampered by an overabundance of bureaucratic rules and regulations which slow and discourage legal entry into the United States. As earlier experience clearly demonstrated, illegal Mexican immigrants (the Wetbacks of the 1950's) were totally without legal rights and protections by virtue of their unlawful presence. While the very cumbersome immigration system may have been responsible for much of this illegal immigration, a major consequence was that these immigrants were subject to abuses from employers and others from which there was no legal redress. An answer to this kind of problem seems to lie in the direction of streamlining the immigration system, not only to facilitate the flow of workers--many of whom seek jobs in highly seasonal agricultural work--but to assure that they have all the legal protections and benefits of bona fide residents in the United States.

Cuban refugees have entered the United States under circumstances very different from those of Mexican immigrants. Aside from an unknown number of Cubans who have slipped into the country undetected, Cuban refugees have been carefully selected and screened, both in Cuba and in this country. As refugees, Cubans come under the provisions of the Cuban Refugee Program, which among other things provides for a relocation allowance and job training. Cuban refugees have thus been favored in ways that others in the United States have not. How much the success of Cuban refugees in the American labor market can be attributed to the refugee program and how much to other factors remains uncertain. It seems clear, however, that the refugee program contributed positively to the resettlement of Cubans. Therefore, it is recommended that first an intensive evaluation of the contribution of the Cuban refugee program be undertaken and, second, that the most positive aspects of assistance to Cubans be incorporated into a general program of assistance for immigrants.

Traditional and legal bases for the continuance of sex discrimination are rapidly disappearing, but discrimination against women in the labor market continues. The increased labor force participation of married women--from 26% in 1953 to 42% in 1973--has not been matched by gains in their levels of occupational achievement and earnings. Women remain largely confined to traditional female jobs with average earnings about half as high as men's.

A vast body of tradition and custom has impeded the advancement of women in the job market, and their progress is further slowed by the likelihood of childbearing and conventional practices of childrearing. Bearing and rearing children often lead to absence from the labor force for varying lengths of time. Marriage itself reduces women's chances of labor force participation. Minority and white women are not basically different in their labor market status, although white women tend to fare somewhat better than others. All groups of women (including Orientals, as described in Volume II) occupy inferior statuses in the labor market.

The full implications of changes in the status of women extend well beyond the scope of this study, but the policy-principle of nondiscrimination based on sex is now firmly established. Regardless of sex, therefore, equally qualified persons should have similar chances for employment and achievement of status in the labor market. Implementation of programs to achieve this goal has been only midly successful, as can be inferred from the sex gaps observed throughout this study. An ultimate solution to problems of sex inequalities may require far more drastic action than thus far imagined. Present family planning and day-care programs provide a means for reducing childbearing and childrearing as obstacles to women's participation in the labor market. Although these services should probably reach more women, they are only part of a more general solution to sex discrimination. The key to nondiscrimination rests more with the attitudes and practices of employers and potential co-workers than with the provision of special services for women.

Other policy-program areas can be mentioned in only the briefest fashion. These include primarily those areas which indirectly influence labor market activity and involve nonskill factors which can impede levels of participation and achievement. All minorities--indeed, all people--need adequate health facilities and services. They also need adequate transportation and housing. Dissemination of employment information should become increasingly comprehensive and more efficient and occupational counseling and referral systems improved. Individual effort to gain employment and advancement in the job market should not be hampered by inadequate services and facilities in any of these areas.

APPENDIX A

MEASURES OF OCCUPATIONAL ACHIEVEMENT, MOBILITY AND DISSIMILARITY

. Results of analysis based on measurement of variables are dependent on underlying assumptions and on specific computational procedures. For these reasons, three of the measures employed in this study are described in order to help clarify what lies behind the measures. This description also should enable others to duplicate or modify the computational routine.

OCCUPATION SCORES

Some means of measuring occupational status is essential for the study of occupational achievement and mobility. Since occupations are nominal categories with no inherent ranking, a measure was sought which would provide a basis for ranking occupational categories from high to low on an underlying variable which might be termed socioeconomic status.

Background

Efforts to measure occupational achievement (prestige or socioeconomic status) extend over the past half century. Counts's (1925) study was one of the first attempts to measure the prestige of occupations. In Mapheus Smith's (1943) study of occupational prestige, thirteen studies were cited which were derived from the work of Counts. A major landmark in studies of prestige is the frequently cited National Opinion Research Center (NORC) survey of the "general standing" of 90 occupations (1947). Reiss (1961) and others have discussed problems involved in the construction of the NORC prestige scale, but the NORC (or North-Hatt) scale remains essentially intact today as one of the best methods of assessing occupational prestige. As noted by Reiss (1961), alternative methods, such as Guttman scaling techniques, successive-interval scaling, and paired-comparisons, have generally been less successful than the NORC scales in yielding occupational prestige measures.

Paralleling attempts to measure occupational prestige is a number of efforts to measure "socioeconomic status." Beginning in 1917, the work of Alba M. Edwards was aimed at developing an ordinal ranking of occupations using census data. Since 1960 there have been at least three notable attempts to measure occupational achievement. The U.S. Bureau of the Census (1963) calculated occupation scores for chief income recipients in families and for unrelated individuals by a simple averaging of three components: education, family income, and occupation. All members of a family were assigned the same score as the chief income recipient. Bogue (1969) proposed a measure of socioeconomic achievement (SEA) based on income and education. His SEA score was derived by averaging income and education scores which were both measured in standard money units. A third approach is best illustrated by the work of Duncan (1961; Blau and Duncan, 1967). His socioeconomic index (SEI) was designed to optimally reproduce a set of NORC occupational prestige ratings. First with 1950 and later with 1960 census data, summary measures for education and income were developed. The first was the percent of workers with four or more years of high school and the second the percent with incomes of $3500 or more (in 1949). After first standardizing by age, regression weights were used to assign scores to all census occupations. The resulting SEI values, with a range from 0 to 96, resemble the index values of Bogue and others.

Duncan's SEI was based on the empirical formula

$$X_1 = .59X_2 + .55X_3 - 6.0$$

where X_1 represents the "high" ratings received by an occupation in a prestige survey, X_2 the proportion of persons in an occupation with incomes of $3500 or more and X_3 the proportion of men in an occupation with four or more years of high school.

Rarely has there been much criticism or suggestion for modifying the SEI. An exception to this is Cain's critique. Cain (1974) argues that Duncan's occupational achievement measure could be altered in a very simple way without much change in results. He points out, for example, that a simple sum of the proportions above the specified levels of earnings and education would probably serve as well as the use of regression weights.

Given the problem of constructing an index to measure the level of achievement for occupations listed in the Census of Population, a decision was reached to adapt Duncan's SEI with relatively minor modifications. The use of education and income to measure the status level of an occupation has precedent and grounding in theory. Education is related to occupation and income, both functionally and temporally. Most people in the labor force have completed their formal education. A major part of acquiring the necessary qualifications for an occupation is termed education. Ordinarily, income from earnings is a direct consequence of employment in some specific occupation. An occupation is logically prior to earnings in the sense that income derived from an occupation is acquired subsequent to the entry into and pursuit of an occupation. Occupation thus becomes an intervening link between education and income.

Assumptions

The construction of a measure of occupational achievement is necessarily based on a number of assumptions, some of which are concerned with measurement theory and others with social and economic circumstances in the real world. Although not immediately important to the analysis and interpretation of findings in this study, it was assumed that the scale of occupational achievement is stable over a period of time. This means that a scale measuring occupational achievement as of 1970 is comparable to one which might have been used 20 or 30 years earlier. Evidence to support this assumption is largely indirect. In comparing their SEI with earlier measures, Blau and Duncan (1967:121) conclude that the error induced by historical variation in the relative status of occupations is relatively minor.

The assumption that occupations are more or less continuously graded appears to be justified. Examiniation of the characteristics of persons employed in specific occupations indicates that occupations overlap in their distributions of income and educational attainment. There are no natural "cutting points" between such groupings as white-collar and blue-collar occupations or between farm and nonfarm occupations. Therefore, if occupational achievement is viewed as manifesting continuous variation, it is appropriate to regard occupational achievement as a quantitative variable.

Evaluation of relationships between the SEI and both education and income suggests the possibility of spurious results, since education and income are components of the measure of occupational achievement. In response to this criticism, Blau and Duncan (1967:124-125) argue that occupation scores are derived from aggregate data on all persons in an occupation category and applied as scores characterizing individuals. Therefore, as a measure of achievement (or prestige), the SEI should legitimately reflect the fact that a major determinant of achievement is education. Consistent with this is the argument that income from earnings is a major consequence of occupational achievement. Blau and Duncan (1967:127) found that, when education was eliminated from the index, results of intergenerational mobility analysis were not materially effected.

Attempts to measure occupational achievement imply a number of assumptions about the nature of a society, such as its value system, institutional structure, social stratification and urbanization. American society is generally regarded as an open-class system in which up-mobility is highly valued and achievement of higher status is a desirable goal. Consistent with this is the notion that everyone should have an opportunity to improve his position in life. A drive for achievement is thereby created and nurtured within society itself. This leads to expectations and aspirations on the part of individuals for the attainment of higher status. An important part of all this is the principle of equal opportunity, according to which people who are equally well qualified should have equal chances to achieve given occupational levels.

A potential source of bias and distortion exists in measures of occupational status and prestige when they are constructed on the basis of characteristics of some particular segment of the population. In Duncan's original index construction (1961:118), for example, the SEI was based solely on the characteristics of men in the labor force, and Bogue's SEA (1969:444) pertained only to men in the experienced civilian labor force. D[illegible]s rationale was that the social status of a family is more likely to [illegible]lt of the husband's occupation than that of the wife, if both were [illegible]d. This may have been more true in 1950 than it is today. With the [illegible]ased employment of women, it becomes less and less certain that wives "derive" their status from that of their husbands. Moreover, when the unit of analysis is the individual, it seems inappropriate to rely on the characteristics of one type of person to reach conclusions about another and different type of individual. These observations suggest that occupation scores may need to be constructed for various segments of the population.

Questions about the nature of the underlying American society continue to pose real difficulties with regard to the measurement of status achievement. Reiss (1961:107-108) raises the question as to whether there is a single value system in American society governing status evaluations. He noted considerable variations in individual evaluations of the general standing of occupations rated in the NORC study and that such variation may result partly from systematic variation in ratings among subgroups of the American population.

In grossly oversimplified terms, this issue may be viewed as a question of whether occupational achievement in American society is basically open or pluralistic (competitive or segregated). As an assumption, the open-society view holds that everyone has an equal opportunity in the competition for occupational achievement. Therefore, all persons should be judged on the same basis. In applying this notion to occupation scores, it would mean that all persons in a given occupation should have the same score. If American society is truly open, this argument is certainly acceptable. Everyone is judged by the same standards.

A major competing hypothesis holds that American society is essentially pluralistic when it comes to occupational achievement. Under pluralistic conditions, workers compete within "their own groups" for occupational status. Furthermore, in each of a number of pluralistic groups a given occupation may be evaluated differently and perhaps also by different standards. If American society is more nearly pluralistic than open, measures of occupational achievement should reflect the underlying pluralistic conditions. As long as men compete among themselves for jobs that are defined as primarily male, and women compete among women for "female jobs," pluralistic conditions exist. Similarly, if Spanish origin men compete primarily for jobs that are defined as appropriate for them, they are not really in competition with others.

In the absence of overwhelming evidence that American society is either open or pluralistic, a considered guess is that reality lies somewhere between these extremes. For some persons and under some conditions, access to jobs is essentially open. For others and under different conditions, not all jobs are equally accessible. Women, for example, have been traditionally and systematically excluded from such jobs as airline pilots, tood and die work, and railroad "brakemen." Puerto Ricans have found their greatest opportunities as operatives in factories, while Mexican men have disproportionately found their opportunities as farm wage workers. Black women are still found heavily concentrated in the private household worker category, while black men are mainly blue-collar workers. This historically or traditionally predominant pattern of sharply different distributional patterns by color, ethnic and sex characteristics persists today, although there are signs that the traditional system of pluralistic occupational achievement is moving toward open competition.

A major task is to try to determine the extent to which occupational achievement occurs under conditions of pluralism. While the final answer may be unobtainable, the strategy nevertheless will be to examine alternative possibilities. Preliminary work suggests evidence favoring the pluralistic argument (Wilber and Hagan, 1974), but further analyses and evaluations will be undertaken in an effort to resolve this issue. In the meantime, occupation scores have been calculated under alternative assumptions about the degree of pluralism in American society. The occupation scores employed in this report are based on the assumption of open competition, i.e., everyone is scored on the same basis. The most immediate and obvious advantage of constructing and applying scores in this way is that it facilitates intergroup comparisons.

Procedures

The general steps in the actual calculation of occupation scores can be sketched briefly. As a preliminary the list of occupations was reduced to a list of 203 from some 400 included in the census detailed list of occupations. This was done primarily because sample frequencies for some occupation categories were expected to be too low for purposes of determining scores. Since age distributions tend to vary from one occupation to another, Duncan's technique of age standardization was used. This involves the construction of five matrices to be used in the age-standardization process.

1) Age-occupation matrix: 56 age categories x 203 occupations
2) Education-age matrix: 21 education categories x 56 ages
3) Income-age matrix: 42 income levels x 56 ages
4) Income-occupation matrix: 42 income levels x 203 occupations
5) Education-occupation matrix: 21 education categories x 203 occupations

Matrix 4 was produced by multiplying matrices 1 and 3 and matrix 5 by multiplying matrices 1 and 2. The results of these calculations were used to determine the proportion above the median levels of education and income for each occupation. The age-adjusted proportion above the median levels for education and income is simply the difference between the overall proportion above the respective medians in the labor force and the difference between the actual and expected proportions. The final estimating equation is

$$Y = .59X_1 + .55X_2$$

where X_1 is the age-adjusted proportion above the median education level and X_2 is the age-adjusted proportion above the median income level. For convenience, the resulting occupation scores were rescaled to the range of zero to .99. The final scale is thus very similar to Duncan's SEI, but not identical. Duncan's SEI has a slightly smaller range of possible values (an upper limit of .96), and he used fixed levels of education and income rather than medians in determining the proportions who were "high" for each of the two components.

RELATIVE MOBILITY SCORES

One of the more difficult measurement problems in this study is posed by occupational mobility. Movement of workers between occupational categories can be determined rather easily, but whether such movements represent upward or downward moves requires at least an ordinal ranking of occupations. Furthermore, the distance of movement from a point of origin represents an important component of occupational mobility that is impossible to obtain by analyzing movement between and within categories.

In seeking a measure of occupational mobility, several standards were established. (1) The measure should be sensitive to both distance and direction of movement. (2) It should be free from the influences of occupational origin. (3) Identical index values should result whenever workers move the same relative distances. (4) Differences in the magnitude of index values should reflect differences in the distance moved. The resulting index values should also permit assignment of mobility scores to individual workers that can be interpreted as indicators of selected components of occupational mobility.

The measure developed for this study, the Relative Mobility Score (RMS), appears to meet these criteria. RMS measures the fraction of the maximum possible change in occupation score regardless of the level of occupational origin. In general terms this can be expressed as:

$$\text{RMS} = \frac{D - O}{L - O}$$

where the numerator is the difference between the levels of occupational destination, D, and origin, O, and the denominator is the difference between the limiting score, L, and the level of occupational origin, O. This equation simply relates differences in occupation scores at two points in time to the maximum possible distance upward or downward from some particular origin.

RMS was defined operationally for this study as the difference between occupation scores for 1970 and 1965 relative to the difference between occupation score for 1965 and the maximum possible change in scores. The general equation is made specific by

$$\text{RMS} = \frac{\text{OCC70} - \text{OCC65}}{L - \text{OCC65}}$$

where OCC70 and OCC65 represent occupation scores for 1970 and 1965. The value of the limit, L, in the denominator represents the upper and lower limits on a given scale of occupation scores, and the occupation scores constructed for this study have a maximum of .99 and a low of zero. Hence, for upwardly mobile workers RMS is calculated by

$$\text{RMS} = \frac{\text{OCC70} - \text{OCC65}}{.99 - \text{OCC65}}$$

and for downwardly mobile workers by

$$\text{RMS} = \frac{\text{OCC70} - \text{OCC65}}{0 - \text{OCC65}}$$

This means of measuring distance and direction of occupational mobility as mentioned satisfies the established criteria for a suitable measure of occupational mobility. RMS will be positive if movement is upward and negative if it is downward. The index can attain values ranging from +1.00 to -1.00. Identical values of RMS will result whenever workers move the same fraction of the distance from their respective origins toward the maximum possible distance. For those who move to the upper limit of .99, RMS will be +1.00 regardless of level of occupational origin. Similarly, those who drop to an occupation score of zero at their destination will have an RMS of -1.00. For those who move the same fraction of the maximum possible distance but less than the maximum distance--either upward or downward--RMS values will be equivalent. For workers who move half of the possible distance, for example, RMS will be .50 for any particular level of occupational origin. Finally, an index value of .50 represents twice the distance of an index value of .25.

Strong arguments against direct measures of occupational mobility have been made (Blau and Duncan, 1967; Hawkes, 1972; Blalock, 1966). In essence the argument is that, for analysis of causes and consequences of mobility, it is simply incorrect to use a mobility score as a variable in straightforward statistical analysis. Other than for purely descriptive purposes, the subtraction of one status score from another is not an appropriate way to measure mobility. Since determinants of an occupational origin status may differ from those of a destination status, mobility is regarded as not causally homogeneous. Statistical manipulation of a mobility score, therefore, runs the risk of confusing cause with effect. The solution to these difficulties in most previous studies has been to treat a destination occupation score as dependent on an origin score.

The rationale for developing a direct measure of occupational mobility begins with the notion that mobility is a distinct phenomenon characterized by a number of identifiable components. The components or properties of mobility are the object of measurement attention, rather than mobility per se. Despite a general awareness that occupational mobility can be distinguished by such dimensions as direction and distance, rarely has there been an effort to specifically identify these dimensions for measurement purposes.

DISSIMILARITY INDEX

The dissimilarity index, D, provides a single numerical value for making comparisons between pairs of groups (Duncan and Duncan, 1955). Historically, D has been used primarily to measure residential segregation, but recently has come to be employed for such questions as occupational discrimination. In essence, D shows the proportion of one group that would have to be shifted to another group in order to attain equal distributions. If, for example, there is a D of .40 between the occupational distributions of Mexican and white men, this would mean that 40% of the Mexican men would need to be shifted into predominantly white male occupations in order to attain equal distributions.

The procedure for the calculation of the D-index is simple and straightforward. D is half the sum of the absolute differences in the proportionate distribution of two groups. Graphically, D can be interpreted as the maximum distance between the diagonal and a "discrimination curve." The formula for calculating D is:

$$D = 1/2 \;\underset{i}{\overset{k}{}}\; x_i - y_i$$

where the summation is over all k categories, and x_i and y_i are the proportions in category i. In male-female comparisons, for example, x_i would represent the proportion of women in category i and y_i the proportion of men in the same i category.

The dissimilarity index is a measure of the unevenness of two distributions and, therefore, does not reflect other aspects of differences between groups. Similar D-values can be obtained, for example, where clusters in specific occupational categories are very different. Consequently, it is important to examine the distributions themselves as a means of interpreting the D-values. The D-index clearly indicates the degree of difference in a pair of distributions, but interpretation of the meaning of an observed difference is dependent on other considerations. The number of categories in a distribution is one influence on the magnitude of the dissimilarity index. In general, the fewer the number of categories, the lower the D-value. Whether some particular D-index measures discrimination or merely inequality in distributions is a question which must be approached with caution. In this study, the general criterion for determining whether discrimination against minorities exists is the principle of "inequalities among equals." In an operational sense this means, for example, that persons with similar levels of educational attainment are equally well qualified for employment and that observed differences, therefore, must be attributed to other factors, including the possibility of discrimination based on "minority" characteristics. There are real difficulties of course in controlling simultaneously for all of the factors relevant to being qualified for achievement in the labor market. As a result, there is always some doubt as to whether persons are "equally well qualified."

APPENDIX B

OCCUPATION SCORES AND FREQUENCES

PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS

	SCORES	MEXICANS	PUERTO RICANS	CUBANS	INDIANS	BLACKS	WHITES
ACCOUNTANTS	739	92	28	81	36	286	14278
ARCHITECTS	888	7	0	8	2	19	1116
COMPUTER SPECIALISTS	820	31	9	7	11	66	4803
AERONAUTIC/ASTRONAUTIC ENG.	926	8	1	4	3	17	1313
CHEMICAL ENGINEERS	965	1	1	2	4	16	1026
CIVIL ENGINEERS	879	35	6	11	25	70	3554
ELECTRICAL/ELECTRONIC ENG.	889	24	8	11	15	76	5556
INDUSTRIAL ENGINEERS	833	23	3	7	10	52	3804
MECHANICAL ENGINEERS	872	15	3	6	3	42	3672
SALES ENGINEERS	894	4	0	0	2	8	1223
OTHER ENGINEERS	881	25	4	6	7	54	4259
FARM/HOME MANAGEMENT ADVISORS	647	10	2	0	32	19	1284
LAWYERS AND JUDGES	976	26	7	9	11	54	5508
LIBRARIANS/ARCHIVIST/CURATORS	711	14	7	3	10	38	2441
MATHEMATICAL SPECIALISTS	768	3	2	3	2	13	723
LIFE AND PHYSICAL SCIENTISTS	882	30	5	18	13	70	3991
OPERATIONS/SYSTEMS RESEARCHERS	779	7	1	3	3	25	1567
PERSONNEL/LABOR RELATIONS WKRS	702	74	17	7	42	132	6076
DENTISTS	989	3	2	9	3	20	1759
PHARMACISTS	911	26	5	11	7	47	2137
PHYSICIANS, MEDIACAL/OSTEOPATH	978	47	12	84	15	223	4966
OTHER RELATED PRACTITIONERS	933	6	0	2	3	13	1089
NURSES, DIETITIANS, THERAPIST	477	207	57	37	158	458	23561
HEALTH TECHNOLOGIST/TECHN.	534	99	34	22	37	201	5420
RELIGIOUS WORKERS	745	29	15	6	44	78	4351
SOCIAL SCIENTISTS	885	7	5	12	7	39	1990
SOCIAL AND RECREATION WORKERS	716	102	44	27	71	197	4879
TEACHERS, COLLEGE/UNIVERSITY	900	42	8	28	32	137	8029
TEACHERS, ELEM./KINDERGARTEN	738	316	39	52	183	558	35574
SECONDARY SCHOOL TEACHERS	848	146	39	50	72	318	19947
OTHER TEACHERS	507	39	6	18	30	91	4140
ENGINEERING/SCIENCE TECH.	640	123	17	45	62	217	6669

ELECTRIC/ELECTRONIC ENG. TECH.	627	54	7	6	18	89	2953
OTHER ENG./SCIENCE TECH.	599	89	16	23	35	163	5766
AIRPLANE PILOTS	784	7	1	0	2	10	1104
OTH. TECH. EX. HEALTH/ENG/SCI	565	37	4	3	19	53	2083
VOCATIONAL/EDUCATIONAL CNSLRS	890	18	2	0	30	28	1686
ACTORS AND DANCERS	415	10	4	4	5	24	513
AUTHORS, EDITORS AND REPORTERS	738	19	3	10	6	47	3756
OTHER WRITERS/ART./ENT.	598	180	56	51	81	371	11468
RESEARCH WORKERS, NOT SPEC.	788	6	5	4	6	23	1820
PROF./TECH./KINDRED WKRS-ALLOC	569	156	48	34	104	272	10513

MANAGERS AND ADMINISTRATORS, EXCEPT FARM

MNGRS/ADM, PUBLIC ADMIN.	642	114	22	9	93	181	7940
OTHER MANAGERS/ADMINISTRATORS	590	112	48	30	61	270	13669
BANK OFFICERS/FINANCIAL MANAG.	743	51	13	26	13	120	6438
BUYERS/PURCH. AGNTS/SALES MNGR	652	130	20	37	~~42~~	~~296~~	~~17708~~
REST./CAFE./BAR MANAGERS	375	133	24	27	28	211	7134
SCHOOL ADMINISTRATORS	914	22	2	2	16	43	3320
MANAGERS/ADMINISTRATORS, NEC	605	698	171	198	203	1432	72400
MNGRS/ADMIN, EXC. FARM ALLOC.	481	100	23	22	30	147	4828

SALES WORKERS

ADVERT. AGENTS AND SALESMEN	670	11	0	2	2	20	1407
DEMONSTRTRS/HUCKSTERS/PEDDLERS	90	81	7	15	38	139	5219
INSUR. AGNTS/BRKRS/UNDRWRTRS	664	97	13	10	20	186	9442
NEWSBOYS	247	15	1	3	4	18	669
REAL ESTATE AGENTS AND BROKERS	535	36	8	11	11	78	5722
SALESMEN AND SALES CLERKS, N.E	365	0	0	0	0	0	0
SALES REP, MNFCTRNG INDUSTRIES	682	75	13	28	14	156	8647
SALES REPS., WHOLESALE TRADE	622	159	24	31	30	269	12978
SALES CLERKS, RETAIL TRADE	167	1157	246	187	256	1794	55883
SALESMEN, RETAIL TRADE	472	146	28	31	28	247	9538
SALESMEN OF SERVICES/CONSTR.	447	63	19	14	23	124	5101
OTHER SALES WORKERS	797	5	2	4	3	19	2120
SALES WORKERS--ALLOCATED	265	155	52	26	45	255	7215

CLERICAL AND KINDRED WORKERS

BANK TELLERS	222	94	29	30	18	187	6479
BILLING CLERKS	233	40	10	13	9	86	2715
BOOKKEEPERS	279	509	165	144	122	969	39754

CASHIERS	109	602	68	69	135	864	19759
CLERICAL SUPERVISORS, N.E.C.	576	28	5	6	21	57	2317
COUNTER CLERKS, EXCEPT FOOD	190	102	33	22	23	187	5207
ENUMERATORS AND INTERVIEWERS	197	38	9	1	15	47	2070
ESTIMATORS/INVESTIGTRS, NEC	510	79	12	16	23	137	6060
EXPEDITERS/PRODUCTION CONTR.	526	75	9	14	22	127	4171
FILE CLERKS	214	206	81	47	50	397	8480
INSUR. ADJST./EXAM./INVSTGTRS	691	14	11	6	9	42	2023
LIBRARY ATTENDANTS/ASSIST.	379	28	3	2	6	36	1697
MAIL CARRIERS AND HANDLERS	441	149	41	20	41	261	7017
BKKPNG/BILLING MACH. OPS.	200	38	16	7	9	65	1824
COMPUTER/PERIPHERAL EQ. OPS.	531	50	18	20	13	116	2040
KEY PUNCH OPERATORS	236	158	55	69	56	385	6888
OTHER OFFICE MACHINE OPERATORS	227	61	23	13	11	113	2480
PAYROLL AND TIMEKEEPING CLERKS	352	45	14	14	14	88	3882
POSTAL CLERKS	465	103	55	10	41	198	5202
RECEPTIONISTS	193	165	47	22	39	276	8262
SECRETARIES	320	807	254	187	327	1750	74920
SHIPPING AND RECEIVING CLERKS	363	309	172	80	56	615	7511
STATISTICAL CLERKS	376	93	22	18	35	164	5563
STENOGRAPHERS	344	54	11	2	27	86	3411
STOCK CLERKS AND STOREKEEPERS	363	278	95	51	76	449	8401
TEACHER AIDES, EXC. SCHL MNTRS	116	182	48	9	160	224	2171
TELEPHONE OPERATORS	203	174	32	12	49	305	10954
TICKET/STATION/EXPRESS AGENTS	569	36	13	16	11	82	2089
TYPISTS	215	610	164	102	236	1053	25612
OTHER CLERICAL WORKERS	395	148	49	17	39	237	6110
MISC. CLERICAL WRKRS	339	202	51	34	70	349	10853
NOT SPECIFIED CLERICAL WORKERS	264	295	83	83	137	598	20064
CLERICAL/KINDRED WRKS - ALLOC.	248	348	144	56	144	690	16793

CRAFTSMEN AND KINDRED WORKERS

BAKERS	270	130	24	16	11	179	2089
MASONS AND TILESETTERS	377	163	5	17	50	211	3650
BULLDOZER OPERATORS	337	89	8	0	46	96	1826
CABINETMAKERS	354	60	10	11	10	83	1305
CARPENTERS	368	517	53	97	289	738	18700
PLASTER/CEMENT FINISHERS	349	236	8	15	27	234	1526
COMPOSITORS AND TYPESETTERS	446	65	33	21	20	132	3057
CRANEMEN/DERRICKMEN/HOISTMEN	438	96	17	5	29	124	2973
DECORATORS/WINDOW DRESSERS	301	41	4	2	7	54	1696
ELECTRICIANS	491	159	37	24	53	297	9497
ELEC. POWER LINEMEN/CABLEMEN	489	30	4	2	17	53	2089

EXCV/GRDNG/RD MACH OP EX BLDZR	392	180	5	5	88	205	4991
FOREGMEN, N.E.C.	518	683	170	92	198	1086	32769
JOB/DIE SETTER, MACHINIST	460	249	51	26	60	371	9296
OTHER METAL CRAFTSMEN	417	166	27	3	61	204	4128
LOCOMOTIVE ENG./FIREMEN	504	4	2	0	4	15	1388
AIR COND./HEATING/REFRIG.	457	45	21	11	12	95	2373
AIRCRAFT	521	139	21	19	30	176	2766
MECHANICS AND REPAIRMEN, AUTO.	394	581	111	80	153	866	17139
HEAVY EQUIP. MECH. INCL DIESEL	451	273	67	27	91	419	11563
HSHLD APPL/ACCES INSTLL/MECH.	428	63	15	5	7	92	2382
RADIO AND TELEVISION	452	101	21	18	22	139	2524
OTHER MECHANICS AND REPAIRMEN	462	260	42	35	60	348	8440
MILLWRIGHTS	486	17	0	0	6	25	1738
PAINTRS, CONST/MAINT/PPR HNGRS	312	343	60	55	112	463	7222
PLUMBERS AND PIPE FITTERS	452	194	28	11	62	249	7717
STATIONARY ENG/POWER ST OP	488	55	5	6	25	90	4086
PRESSMEN/PLATE PRNTRS, PRINTNG	444	104	47	21	16	184	2994
SHEETMETAL WRKRS/TINSMITHS	462	137	5	4	23	156	3144
APPAREL CRAFTSMEN/UPHOLSTERERS	278	217	45	39	22	293	2483
LINEMEN/SERVICEMEN - TEL/POWER	518	85	32	11	20	156	5759
TOOL AND DIE MAKERS	511	51	5	5	20	92	4116
OTHER CRAFTSMEN	376	595	139	70	185	871	16609
CRAFT APPRENTICES	481	65	9	8	18	77	2024
CRAFTSMEN/KINDRED WRKRS, ALLOC	369	328	80	45	153	441	11068

OPERATIVES, EXCEPT TRANSPORT

ASSEMBLERS	225	1235	395	183	289	1871	21790
BOTTLING/CANNING OPERATIVES	171	217	16	6	33	203	1267
CHECKERS/EXAM./INSPECT., MANF.	278	440	115	68	111	657	16296
CLOTHING IRONERS AND PRESSERS	51	418	69	55	101	568	3038
CUTTING OPERATIVES, N.E.C.	253	231	75	43	64	339	3578
DRESSMKRS/SEAMSTRS, EXC FACTRY	73	81	21	47	21	181	2274
FILERS/POLISHERS/SANDERS/BUFFR	277	132	59	20	32	210	2326
GARAGE WRKS/GAS STAT. ATTNDNTS	270	290	25	14	74	350	5548
PRODUCE GRDRS/PCKRS EX FAC/FRM	72	188	9	13	21	174	1169
GRADERS/SORTERS, MNFG.	18	381	7	6	33	292	885
LAUNDRY/DRY CLNG OPERAT. NEC	83	315	59	33	67	406	3151
MEAT CUTTERS AND BUTCHERS	364	375	40	46	61	433	4971
MINE OPERATIVES, N.E.C.	363	194	6	2	84	233	3702
PACKERS/WRPPRS, EX MEAT/PRDUCE	128	1112	343	134	160	1488	12127
PAINTERS, MANUFACTURED ARTCLS	311	177	45	27	32	229	2167
PRECISION MACHINE OPERATIVES	407	292	62	23	55	398	8559
PUNCH/STAMPING PRESS OPERATVES	281	182	76	17	33	256	3573

PUNCH/STAMPING PRESS OPERATVES	281	182	76	17	33	256	3573
SAWYERS	218	73	6	10	44	101	1996
SEWERS AND STITCHERS	29	1297	703	738	240	2819	22375
STATIONARY FIREMEN	376	39	16	7	25	81	2009
TEXTILE OPERATIVES	140	91	89	64	127	316	9671
WELDERS AND FLAME-CUTTERS	399	543	67	54	199	661	10673
OTHER METAL WRKNG OPERATIVES	390	47	12	7	7	62	773
OTHER SPECIFIED OPERATIVES	262	1337	388	232	389	2035	28118
MACHINE OPER., MISC. SPECIFIED	277	1092	314	145	274	1502	21882
MACHINE OPER., NOT SPECIFIED	297	554	363	206	113	1187	10510

TRANSPORT EQUIPMENT OPERATIVES

NOT SPECIFIED OPERATIVES	270	272	206	61	83	566	6254
OPERATIVES, EX TRANSPRT, ALLOC	194	463	227	92	235	805	13361
BUSDRIVERS	239	84	34	16	64	173	4329
DELIVERYMEN AND ROUTEMEN	387	388	104	69	60	573	10526
FORKLIFT/TOW MOTOR OPERATIVES	391	246	38	13	38	281	3570
RAILROAD BRAKEMEN/SWITCHMEN	494	31	6	0	5	45	2015
TAXICAB DRIVERS/CHAUFFERS	282	72	99	19	23	215	2543
TRUCK DRIVERS	369	1062	151	65	303	1436	26177
OTHER TRANSPORT EQUIP OPER	339	37	20	9	10	80	782
TRANSPORT EQUIP OPER, ALLOC	316	92	25	8	50	138	3020

LABORERS, EXCEPT FARM

CONSTR LABOR, EX CRPNTRS HLPRS	282	1062	67	37	312	1093	9938
FREIGHT AND MATERIAL HANDLERS	312	534	97	31	171	642	8997
GARBAGE COLLECTORS	252	93	13	2	15	105	849
GARDENERS/GROUNDSKPRS, EX FARM	242	608	40	18	112	584	4571
LUMBERMEN/RAFTSMEN/WOODCHPPRS	183	9	1	1	106	21	1651
STOCKHANDLERS	259	357	89	31	50	468	7167
VEHICLE WASHERS/EQUIP CLEANERS	237	157	31	15	33	195	1497
WAREHOUSEMEN, N.E.C.	417	150	16	12	34	172	1844
OTHER SPECIFIED LABORER	266	218	25	26	90	250	3067
MISCELLANEOUS LABORERS	278	326	52	7	110	347	3416
NOT SPECIFIED LABORERS	231	651	135	49	314	844	6799
LABORERS, EX. FARM, ALLOC	255	206	46	9	158	253	4016

FARMERS AND FARM MANAGERS

FARMERS %OWNERS AND TENANTS<	272	170	3	8	164	334	26685
FARM MANAGERS	409	18	3	2	17	29	1181
FARMERS/FARM MANAGERS, ALLOC	211	26	2	1	26	35	1555

FARM LABORERS AND FARM FOREMEN

FARM LABORERS, WAGE WORKERS	89	4268	113	28	664	3506	11779
FARM LABOR, UNPD FAMILY WRKR	69	30	1	1	43	35	1859
OTHER FARM LABORERS/FOREMEN.	339	109	6	1	16	88	646
FARM LABORERS/FOREMEN, ALLOC	113	118	9	2	94	120	1238

SERVICE WORKERS INCLUDING PRIVATE HOUSEHOLD

CLEANING SERVICE WORKERS	169	1951	464	265	632	2982	27886
BARTENDERS	252	103	33	20	47	169	4157
COOKS, EXCEPT PRIVATE HOUSEHLD	86	762	168	62	256	1108	16017
WAITERS/FOOD COUNTER WORKERS	44	925	157	116	366	1488	33578
OTHER FOOD SERVICE WORKERS	60	771	219	148	196	1148	8944
NURSING AIDES/ORDERLIES/ATTND.	96	497	117	32	354	820	14293
PRACTICAL NURSES	216	141	27	9	86	240	4827
OTHER HEALTH SERVICE WORKERS	193	126	29	19	39	200	5026
BARBERS	324	157	25	23	29	204	2895
HAIRDRESSERS/COSMETOLOGISTS	115	406	72	98	95	658	12578
OTHER PERSONAL SERVICE WORKERS	211	294	117	71	201	574	9914
FIREMEN, FIRE PROTECTION	523	47	9	1	24	80	3572
GUARDS AND WATCHMEN	309	102	54	11	59	225	7107
POLICEMEN AND DETECTIVES	549	106	24	5	72	175	7514
SRVC WRKRS EX PRVT HSHLD, ALLC	146	497	124	46	331	709	12388
PRIVATE HOUSEHOLD WORKERS	5	1004	39	36	352	1320	12570
PRIVATE HSHLD WRKRS, ALLOC	0	0	0	0	0	0	0

*FREQUENCES FOR OCCUPATIONS LISTED WITH
NONE ARE NOT AVAILABLE AT THIS TIME

APPENDIX C

PUBLIC USE SAMPLES

The statistics in this report are estimates derived from the Public Use Samples of basic records from the 1970 census. The reliability of specific estimates is influenced by two types of errors--sampling and nonsampling. Sampling errors occur because observations are based on a sample rather than on an entire population. Nonsampling errors result from a variety of conditions: incomplete information about all individuals in the sample, definitional difficulties, differences in interpretations of questions, inability or unwillingness to provide correct information, and mistakes in recording or coding the data. Nonsampling errors also occur in complete census enumerations.

Errors attributable to sampling were not estimated in this study, primarily for two reasons. First, samples were sufficiently large and relatively homogeneous to reduce the need for making error estimates. Second, detailed and comprehensive error estimates involve a major task the costs of which were regarded as unwarranted for this study. It is also the case that the customary estimates of error do not account for nonsampling errors. In lieu of error estimates and tests of differences, estimates and differences between estimates were judgmental. Where differences are relatively large and patterns fairly consistent, it was felt that error estimates and tests were unnecessary. When intergroup differences are relatively small, there is a risk of misinterpreting the sample estimates.

Six 1/100 Public Use Samples were constructed from the 1970 census of population and housing: three from the 15% questionnaire samples and three from the 5% questionnaire samples. The three samples for each of the questionnaires are the State, County Group and Neighborhood Characteristics samples. Each of the samples is self-weighting; that is, each person or household in a 1% sample can be assigned a weight of 100, or a weight of about 16.7 in a 6% sample.

The Bureau of the Census has published a number of reports treating various aspects of samples, and readers are referred to such publications as the following for more detailed discussions of sampling and nonsampling errors and descriptions of the Public Use Samples.

Public Use Samples of Basic Records from the 1970 Census: Description and Technical Documentation. Washington, D.C., 1972.

Standards for Discussion and Presentation of Errors in Data, Technical Paper No. 32. Washington, D.C., 1974

Sampling Applications of the 1970 Census Publications, Maps, and Public Use Summary Files, Technical Paper No. 27.

Coding Performance in the 1970 Census, Evaluation and Research Program PHC(E)-8, 1974

Estimates of Coverage by Sex, Race and Age: A Demographic Analysis, Evaluation and Research Program PHC (E)-4, 1973

APPENDIX D

FURTHER RESEARCH

A keener awareness of the need to press further with investigations of minorities in the labor market is one of the consequences of this study. Despite the detailed information in this report, there are many instances in which further probing could provide even more useful information. There are also many aspects of participation and achievement in the labor market which were either not included or were touched upon only lightly. As a result there are many questions yet to be answered and this research is useful as a means of identifying topics and questions in need of further investigation.

In specifying extensions of this line of research, only information that can be derived from census data is considered. This does not imply that other sources should not be utilized, but rather it demonstrates the potential richness of information from data of this kind. There are important kinds of questions which, of course, can not be handled with census data. Attitudinal, motivational and personality information is entirely lacking in census-type data. So too is information lacking on employment practices of business firms, the activities of labor unions or the operation of specific governmental programs. Census data for individuals tend to be cross-sectional which severely limits analysis of changes and trends except on a decennial basis. Studies of status achievement and discrimination need to employ a variety of approaches and kinds of information. Nevertheless, census data have not yet been fully exploited, and from this investigation alone a number of worthwhile extensions on research are quite apparent.

Further research may be grouped roughly into two not mutually exclusive categories: research which probes more intensively into topics covered in this investigation and research which extends the present investigation by examining various aspects of achievement and discrimination not covered in this investigation.

First, there are a number of specific types of cases about which further information is needed. Occupational mobility was distinguished on the basis of direction of movement, and there is a strong suspicion that major differences exist between workers who move up and those who move down the occupational scale. Nonmobile workers may differ from both kinds of movers. A much more intensive analysis of similarities and differences by the direction of occupational mobility is needed in order to determine such things as whether differences in education, vocational training, color and sex account for movement either up or down.

Quite different are questions about those who have never worked. Are minorities more likely than whites to have never been employed, even among those with similar qualifications for participation in the labor market? Women, of course, more often than men have never entered the job market, but is this because they lack the necessary qualifications? College graduates do comparatively well in the labor market, and with the 1970 census data it is possible to determine what has happened by 1970 to students in college in 1965. How many were employed in 1970, in what kinds of jobs and with what level of earnings? Since all who were college students in 1965 and graduated by 1970 can be identified, it would be instructive to determine whether color minorities and women do as well as white males or not?

Immigrants are a very special type and the circumstances surrounding immigration from particular countries and the time of immigration may have much to do with participation of the foreign born in the American labor market. The overall indications in this study showed rather slight and inconsistent differences between the foreign born and natives. Despite this there is a need to push further to ascertain whether differences in age at the time of immigration, differences in the dates of immigration and differences in general economic and political conditions at the time of immigration affect the immigrant's participation in the labor market.

Part-time workers are another distinctive type, and it is important to ascertain more fully their characteristics. Women are more likely than men to work less than a full year. Is this primarily because of family responsibilities or is it because women are concentrated in such occupations as teaching which normally involve less than 52 weeks of work?

Persons who have had vocational training are expected to benefit from their training and generally this appears to be the case. In reviewing the participation and achievements of former trainees, however, their performance should be examined more intensively to determine whether other factors may help explain their apparent success. Their level of educational attainment and disability status, for example, should be controlled before determining the effects of vocational training. For women, the presence of young children at home may offset the gains of vocational training.

This report concentrates on persons employed in 1970 with the result that recruits and those who left the labor force between 1965 and 1970 were neglected. As a consequence of this, questions concerning inequalities and discrimination for recruits and dropouts remain unanswered. Did minorities who entered the labor force between 1965 and 1970 obtain jobs and earnings at the same levels as the majority? Did the minority dropout--who left the labor market between 1965 and 1970--leave at the same rate as majority workers and did minority workers leave from the same occupational as majority workers or not? Is it the lack of education and vocational training that induces departure from the job market?

Examination of differences in the effects of the changing occupational structure--decreases in the numbers employed in an occupation--was confined to persons employed in both 1965 and 1970. While this procedure simplified and made the analysis more manageable, it also effectively removed from consideration the effects of structural changes on labor turnover. Therefore, a number of questions remain to be answered. Are minorities more likely than the majority to leave the labor force because of structural changes? What effect does structural change have on drawing recruits into the job market and does this vary between men and women and between color groups? Do minority workers join the ranks of the unemployed or do they more often leave the labor force entirely when forced out by changes in the occupational structure?

Occupational achievement, mobility and earnings are affected by the type of industry. Major industry groups were employed in this study, but it should be informative to reexamine the data using a more detailed industry classification. While it may not be feasible to work with the most detailed industry classification possible, specific industries with relatively large numbers of workers can be singled out for special analysis. Manufacturing industries, for exmpale, account for a substantial part of total employment and differences between employment in durable and nondurable manufacturing may easily be examined. Occupational structures vary, of course, by type of industry, and this sgugests extending research to evaluate discrimination within an industry while holding constant the occupational structure, or alternatively, evaluating discrimination within an occupational group while holding industry constant.

The degree of segregation in an industry or occupation may help explain differences in labor force participation, occupational achievement, mobility and earnings. No such measures were used in this study, but it is strongly suspected that some industries and occupations are more segregated than others and that such segregation influences the dependent variables (employment, achievement, mobility and earnings of minorities). Industrial and occupational segregation, as structural factors, may be measured by merely taking the percentage of whites, or white males employed. Individual workers can then be assigned a "segregation score" in accordance with their industry and occupational groups.

Differences in the location of workers result in differences in their earnings and probably in their level of occupational achievement. Part of the observed differences between workers are undoubtedly attributable to regional factors and whether they lived and owrked in a metropolitan area or not. In the day-to-day routine, inequality and discrimination take place in local areas and the extent to which local variations occur is obscured at the national level. Minorities, of course, are unevenly distributed across the country. Hence, while it is informative to establish benchmarks at the national level, in both theoretical and program terms it is important to also know about variations by regions and localities.

Education, occupation and earnings represent different but interrelated components of socioeconomic status and one of the questions about achievement pertains to the degree of consistency among the components of status. An unexplored area of investigation is the status consistency of minorities. Status consistency (or inconsistency) can be examined for individuals, where a central question is whether the components of status for a person are basically consistent (i.e., all about equal). For some ethnic minorities and also for women, it is suspected that a high degree of inconsistency exists. Inconsistency results, for example, when a worker has a high level of educational attainment and low levels of occupational achievement and earnings. Differences in status consistency between individuals also can be examined. To what extent are the statuses of spouses consistent and does the nature and degree of status consistency influence the achievement levels of either or both spouses? Is status inconsistency greater for some ethnic groups than others, and, if so, does this relate to discrimination?

There have been many clues and suggestions that labor force participation and status achievement are related to the family life cycle, especially for women. So far there has been almost no systematic investigation of this kind of relationship. Factors such as age, marital status and the presence of children are related to employment and status achievement. There are indications, however, that family stage is a more powerful explanatory variable than age or marital status alone. Therefore, there is good reason to control for the influence of family stage in evaluating intergroup difference in status achievement.

Studies are underway to determine the nature of relationships between migration--residential change--and labor force participation, occupational achievement and earnings. Some of these are concerned with the effects of migration on the employment and occupational achievement of women. This line of investigation should be extended to include color and ethnic minorities as well. The 1970 census data were not planned or organized in a way which would permit the fullest exploitation of interrelationships between migration and occupational mobility. Still it is possible to push forward in this direction with a special emphasis on ethnic minorities and women.

The "quality of life" or level of living achieved by workers is presumed to be higher for those with higher levels of educational attainment and higher earnings. This has not yet been demonstrated. One way of making an inroad is to construct a level of living index as a means for determining just how much it is influenced by earnings, level of occupational achievement and education. Levels of living may vary among ethnic groups and such variations may be partly a consequence of inequalities and discrimination in the labor market.

Trends in inequalities and discrimination are generally not well described. Nationally, educational levels are rising, workers are shifting away from farm occupations and lower blue-collar to white-collar occupations, and earnings are increasing. Whether each of the several color minorities and women are changing in the same ways is not yet clear. Comparisons based on 1960 and 1970 data would provide information about such trends, and the Current Population Survey provides annual data on a relatively small national sample which permits the construction of barometers to measure changes in discrimination.

In sum, there are a number of possible extensions and refinements that might be based on the present study. Although this research has gone beyond previous studies by covering more aspects of the labor market and by including groups such as Koreans for whom there has been no detailed information in the past, there are quite obviously a number of additional questions that require answers. The foregoing remarks about future research are extremely sketchy, but hopefully they will help provide the necessary impetus to move forward.

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